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The Utility of Colleges of Pharmacy. By Prof. LEWIS H. STEINER, M.D., of Baltimore.

As a most interesting and important subject, it is proposed to glance at the rise and progress of the pharmaceutist's calling, and the advantages, to the community as well as himself, arising from the establishment of colleges where he can acquaint himself with those branches which are required for the successful prosecution of this calling.

Early in the history of the human race, before the mind had even ceased to wonder at the numberless beauties of the early Paradise, while the eye gazed in admiration at the *

> "Groves whose rich trees wept odorous gums and balm,
> Others whose fruit burnish'd with golden rind,
> Hung amiable, Hesperian fables true,
> If true, here only, and of delicious taste.
> Betwixt them lawns, or level downs, and flocks
> Grazing the tender herb, were interpos'd,

* Paradise Lost, IV.

Or palmy hillock, or the flow'ry lap
Of some irriguous valley spread her store,
Flow'rs of all hue, and without thorn the rose:"—

Early in the history of what is now clothed in all the mystic beauties of dream-land, though then a reality, we learn from the Sacred Record that sin came into the world, bringing with it *disease* and *death*. What is not included in these two words,—what of anguish and suffering to the human race, hours of pain and affliction, of bitter sorrow and keen soul-racking distress,—tears of grief and agony of affliction? From them spring the anxiety which makes the mother's heart throb with sadness as she waits by the bedside of the little infant, who draws life and sustenance from her loving breast,—the bitter anguish of the family at the suffering couch of a beloved and adored parent,—the anxious expectations and dread of the partner of toils and pleasures as she lingers by the side of the husband of her choice,—the weeping and wailing of friends as the strength and manly beauty, and giant mind and great loving soul of some fellow being is about to be lost to them for ever in this world. What hours of unwearying attention through the day, when the world, seemingly unmindful of the sufferings of the afflicted, is rushing along in its course for honor and gain,—through the night, when the quiet and silence makes each minute an hour of pain, each hour a week of heart-breaking anguish,—what sad hours are brought back to the mind by the mere utterance of the word—disease! All the disappointments, that failures in the contest for honor, station, or emolument may bring to the sensitive soul of man, sink into insignificance when compared with the wretchedness and despair that *disease* sows, with a liberal hand, among the sons of men. But the same Providence which sent the fell destroyer to close the earthly career of the immortal being,—which imposed the penalty of disease and suffering for the first great act of disobedience, has also taught man how its severest pains may be mitigated; and, if she so will, how the final close may be postponed to a future day. We read,* how, "The Lord hath created medicines out of the earth; and he that is wise will not abhor them. And he hath given men skill, that he might be honored in his marvellous works. With such doth he heal (men.) and taketh away their pains. Of such doth the apothecary make a confection; and of his works there is no end; and from him is peace over all the earth."

* Ecclesiasticus xxxviii. 4–8.

The history of the various medicaments now employed in the treatment of disease, is enveloped in much obscurity. We are not able in the case of most of them to state when, where, or by whom they were first found to have a medicinal effect on the human system. Far back in the infancy of the race, by a happy accident, if we dare call such an occasion by that name, their properties have been discovered, or by unwearying experiment their efficacy has been determined. Gradually they have been made known to the world. At first communicated with solemn injunctions of secrecy, as heir-looms of priceless value, from teacher to student, from father to son, or with grave solemnity and mystic forms from village crone to a tried and trusty associate. Superstition would necessarily invest the substances, whose properties were thus made known, with more than real properties. It would in course of time gradually surround the *preparation* of the medicine with more importance than the substances which entered into its composition, and the rites and ceremonies then adopted, would be looked upon as the really efficient agents. Such a result might naturally be expected from those who were ignorant of the laws of science. The medicine man, among the aborigines of our own continent, by a series of meaningless rites and terrifying forms of procedure, endeavors to convince the bystanders as well as the sick, that his power is of a supernatural character. The physicians of the more cultivated nations of the globe, not many centuries ago, were not altogether devoid of a similar actuating cause. The more mystery surrounding the preparation of the potion, the more value was supposed to be conferred upon it. The prejudices of the people were availed of in order to control their faith and confidence in his skill. Articles of an inert or disgusting character were taken and combined with the really useful, and the whole was then inflicted upon the patient. The articles contained in the famous cauldron, of the witches in Macbeth, were not very dissimilar from those at times forced into use by the practitioner of medicine in the middle ages. Full as outré and disgusting were some of the substances as the,

"Fillet of a fenny snake,
Eye of neut, and toe of frog,
Wool of bat, and tongue of dog,
Adder's fork and blind worm's sting,
Lizard's leg, and owlet's wing;
* * * * * * *
Scale of dragon, tooth of wolf:
Witches mummy; maw and gulf

Of the raven'd salt-sea shark;
Root of hemlock, digg'd i' the dark;
* * * * * * *
Gall of goat, and slips of yew,
Silver'd in the moon's eclipse;
Nose of Turk, and Tartar's lips;
Finger of birth-strangled babe,
Ditch-delivered by a drab."

But the day was near at hand when science should dawn upon the world, and such articles would necessarily be driven out of the practice of the medical man,—leaving their place to be supplied by others of real efficacy and value. From the dusky clouds of the Alchemist's cell, was to proceed a new and beautiful science, which should delight in extracting the effective principles contained in minerals and plants and animals, and irradiant with the enthusiasm of its youthful nature was to seek out ignorance and superstition in all their hiding places, and drive them from the abodes of men. Chemistry paved the way for the appearance of Pharmacy, and gave all the science which the latter possesses, removed mystery from the shop, and made the Apothecary assume a position worthy of him who was to be the Physician's support and assistance.

The origin of Pharmacy, or of that science which treats of "the preparation, preservation, and compounding of substances for the purposes of medicine," is intimately connected with the first appearance of Chemistry. Had the latter never existed, the former would have had no character worthy of the respect of the man of science. It would have consisted, at most, of magic formulæ, disgusting decoctions, inert compounds, and worthless modes of proceedure. No enlightened person would have resorted to it, unless forced by the fear of impending death, and distrustful of the unaided powers of nature to throw off offending matter. The medical profession would have been unable to render relief, even when the nature of disease had been fully discovered and recognized as not necessarily fatal. Its cultivators could have never passed beyond the stage of mere students into the natural history of man,—his physiological condition and the pathological changes induced by disease, with probably a certain amount of surgical knowledge, over to the high station they now occupy as ministers to his wants and his sufferings. Pharmacy was the science which was to invest them with a perfect armament for use in their professional labors,—to give as much certainty to their professional practice as fallible beings can be expected to possess. Its prosecution was to employ the aid of chemistry in its

widest sense, in its most potent processes, so as to ensure the full equipment of this armament.

How interesting does this connection of chemistry, pharmacy and the medical profession appear to the student of science, interlocking and embracing each other as it were, until the lines which mark the borders become less and less distinct, and the three appear but as members of the great science of Nature,—parts of one vast organism which involves the constitution and properties of all bodies from the grain of sand by the sea-shore, the impenetrable adamant, the one-celled animal whose life is hardly established before its death is at hand,—the vegetable through all its ramifications of form and structure,—up even to the constitution of the brain itself of him, who has been endowed with a certain degree of mastery over them all. All the parts of this organism are perfectly harmonious. No discordant sound is heard, but the loud swelling note of praise it sends up to the Heavens above shows that all are attuned by the same great Architect, who has taught man how to find out their hidden truths and sacred laws.

Pharmacy, with which as a profession we have especially now to do, did not spring up at once in all its strength and power from the seed sown by chemistry. Its first steps were like the first efforts of the infant to walk. Many a fall to the ground, many a lapse into the errors and superstitions from which it had just escaped, many a tottering step, was experienced, before it planted the foot securely on the firm basis of truth and advanced steadily forward, growing in time to the stature of an adult, remarkable for strength and beauty. How could it be otherwise when the lingering traces of old superstitions were still found, when the Amethyst was supposed "to make men sober and steady," the granite "to strengthen the heart and hurt the brain," the ruby "to take away idle and foolish thoughts and make man cheerful," the emerald "to strengthen the memory and stop the unruly passions," the diamond "to make him that wears it unfortunate;" when "the flesh of vipers being eaten was said to clear the sight, help the vices of the nerves and resist poison exceedingly," millipedes were said "to help the yellow jaundice," if bruised and mixed with wine, earthworms were considered "an admirable remedy for cut nerves," and oysters were believed as having the power of "drawing the venom, when applied alive to a pestilential swelling. It required a long time utterly to remove these lingering relics of an ignorant past, and to make way for the period when all should do, even as he who believed in all these fancied articles of the Materia Medi-

ca, and yet could preface his Dispensatory with the remark that "he consulted with his two brothers, *Dr. Reason* and Dr. Experience, and took a voyage to visit his mother *Nature*, by whose advice, together with the help of Dr. Diligence, he obtained his desire." By close study under the guidance of such tutors, and with the aids of chemistry, these fanciful properties of medicine were rejected and nothing retained that was not tried and approved by science.

The proper studies of the Pharmaceutist,—that is those which shall enable him to prosecute his calling with intelligence and certainty—are comprehended in the colleges of Pharmacy under three heads, Chemistry, Materia Medica, and Practical Pharmacy. The so-called science of Materia Medica embraces everything relating to the physical properties and therapeutic virtues of all those substances which are capable of producing a beneficial effect on the diseased body, and of removing injurious principles that may work detriment to the organism. Chemistry then steps in and claims the Pharmaceutist's notice, because it teaches him the properties of all these substances when they are brought into combination with each other, and whether the results of such combination shall be inert or of increased power. Finally practical Pharmacy shows how all this knowledge can be made available in the preparation of medicines for most efficacious administration. This constitutes the narrowest possible curriculum of studies that can be allowed him who devotes himself to the profession of Pharmacy,—should he feel disposed to investigate more fully the secrets of his calling, the whole domain of Natural Science is connected in some way or other with these three branches. Mineralogy and Geology, Entomology, Conchology, and Zoology in general will furnish him facts and information that can be of general use,—while Botany is almost indispensable as a guide to the recognition of the plants which experience has taught his predecessors and companions are invaluable for medicinal purposes. Thus the study of the sciences, which illustrate the three kingdoms of nature, makes him a master over their therapeutic properties, and he can with certainty procure from them all such as will be required by the physician. His knowledge need not, *should not* cease with those studies we have mentioned as absolutely necessary to fit him for the prosecution of his calling. In fact they only show him how he can walk along in the beaten track which has been laid out and planned by his predecessors. With them alone he will only be able to avoid doing wrong,—to avoid committing gross and perhaps fatal errors. But if he designs the attainment of a scientific position among his confrères, he must become

himself an investigator, and endeavor to find out new plans to attain old results, or new results from the application of old laws. The day is past, we hope, when the Apothecary can rest satisfied with being a mere dispenser of articles, of whose therapeutic properties he knows nothing, and which he only recognizes by their *physical* properties. His position as a scientific man should incline him to look more deeply and thoroughly into the nature of the substances with which he is thrown into daily contact.

Some one may object here that the kind of knowledge hinted at, will make him stride after the physician's office, and instead of being satisfied with his position as a preparer and dispenser of medicine, he will aim also at the office of prescription. Now we think that such will never be the result with a pharmaceutist, whose knowledge is wide and comprehensive. The very extension of any one's knowledge on a particular subject makes him modest as to his acquaintance with all others. He has learned how much time and care and labor is required to perfect one in a particular subject, and is hence disposed to prefer the results of others labors in their own specialities, to the slight knowledge which *he* may have of them. It is not the highly educated and well-trained pharmaceutist who avails himself of every opportunity, that offers, in order to exhibit his knowledge of therapeutics by prescribing for the sick. No! where little knowledge exists of the proper subjects of his calling, we will find more arrogance as to the vastness of the mental capabilities and more presumption as to the necessity for their use. But when we find a conscientious appreciation of the difference in the two callings, and a comprehensive knowledge of his own, there we shall find one who avoids trenching upon subjects which do not belong to his own province and which interfere manifestly with the rights of the physician. The third article of the Code of Ethics, adopted by the Maryland College of Pharmacy, shows how thoroughly its members recognize the difference between the two callings, and how careful they are in drawing the lines which divide them. This article reads as follows: "As the diagnosis and treatment of disease belong to the province of a distinct profession, and as a pharmaceutical education does not qualify the graduate for these responsible offices, we should, where it is practicable, refer applicants for medical aid to a regular physician. The oft repeated assertion that many persons are not pecuniarily able to employ a physician may be met with the fact, that there are several excellent and well-managed Dispensaries where medical attendance and medicines are furnished gratuitously." Such doctrine we should expect

from the enlightened mind which has been devoted to any branch of study. It is the quality of knowledge not to vaunt its own merits, or to usurp the place of others.

In an enterprise like the establishment of a College of Pharmacy the physician has nothing to lose and everything to gain. His prescriptions will be prepared by a scientific man, whose education and daily practice especially fit him for the duty; while he will have one on whom he can rely for the preparation of new chemical compounds to meet new therapeutic indications with certainty and success. The apothecary is then no longer a mere vender of herbs with miraculous healing powers, of minerals whose properties were asserted to be of the most contradictory and ridiculous character, or of animal products, whose disgusting nature forbids us almost to entertain the thought that they were ever employed for medicinal purposes,—he is now the aid and assistant,—the good Samaritan who offers the oil and wine when the physician may think the exhausted energies of the sick demand remedial applications.

But may not all the knowledge we have referred to as necessary to the Apothecary, be obtained by reading in the shop, by carefully examining, in an experimental way, into the properties and uses of his drugs, and by practically employing himself in the details of Pharmacy? This question would however serve as an objection against any and all education whatever, except that which a man acquires by his own unaided efforts. It is one, to which we dare not give a direct, categorical answer; since a negative would not be truthful in some particular instances, and an affirmative would imply just as much error. We dare not, I repeat it, say that all this *might* not be accomplished, and has not been accomplished by some, whose perseverance and indomitable will, enabled them to conquer the difficulties which attend a private course of study. They have been enabled to gain a thorough and satisfactory knowledge, by dint of labor that few are equal to. The object of all teaching is to pave the way for the easiest possible acquisition of knowledge,—to furnish such guide-posts and finger boards along the road that the student shall not go astray, and wander in dark and obscure thickets by the wayside, but shall find that his easiest path is that which science illuminates with her own bright rays,—to free his mental vision from all error. It is not intended that the student shall be freed from all labor. For, there is no means of accomplishing mental labor, by appliances similar to those which the mechanic can contrive with the aid of steam or electricity. There is no royal road to learning; no

rail-train up the Hill of Science. With all our ability to conquer high grades, yet such a steep is only to be ascended by the slow-toiling foot traveller. If he starts without a guide, he may get himself involved in the intricacies of the bushy undergrowth which surrounds its base ; allured by the leaping mountain stream, his footsteps may be checked by the marshy ground that it has formed in the little hollow through which it passes ; attracted by some inviting path he may find himself, after days of labor, at the point from which he started, having encircled the base instead of ascending the hill. But with untiring perseverance he may overcome all difficulties and reach a commanding height. The number of those however is few in all professions and callings, who have, without aid and assistance, accomplished such a glorious result. We are proud to refer to them when we speak of what has been done by those who have pursued knowledge under difficulties. For the majority of mankind, however, guides must be procured who shall show where the best paths for the ascent are to be found, and who shall train the minds and judgments until they have acquired strength enough to grapple with difficulties without external aid, and ability to decide for themselves, which is the best path. The teacher occupies the peculiar prerogative of communicating to the taught, that which has been made familiar to his own mind by dint of special devotion to any subject, and thus preventing the consumption of strength and energy on that which may not require any such outlay. When the mind has become habituated to the work, like the tree which has grown stout and strong, it no longer requires props to support it, but, rejoicing in its own strength, encounters the storm with impunity.

Again, with private study there is a want of that system which ensures the most speedy success, and the most reliable results. The instructions of the college communicate system to the student's labors. He has presented to him by those who are conversant with the particular topic, in connected form, the laws which underlie its study, the facts which prove those laws and from which they have been deduced, and also the mode of investigation, by which other deductions may be made and other reliable facts accumulated.

Now to apply these ideas to the College of Pharmacy. The Materia Medica are presented to the student's mind in their relations to each other, and to the peculiar symptoms for which they are adapted. The striking points in the history of each are brought before him in a way that claims his attention. The eye is not only

impressed with these, but the ear at the same time, and thus the two senses are brought to act contemporaneously in the study. In chemistry, the results of other's labors as well as those of him who lectures, are brought before the student, experiment demonstrates the truth of the principles laid down in the text-book, and the science becomes a living, actual fact instead of a mere sequence of dry detail. The same is true of practical Pharmacy. While the regular work of the shop would in course of time familiarize the apprentice with nearly all the processes of this art, yet the rationale underlying these, and their connection with each other would hardly be appreciated.

We can then sum up the utility of the college as consisting in the presentation of the surest and swiftest method of gaining a knowledge of Pharmacy, in clothing this knowledge in an attractive form,—bringing out the most important points for the student's notice,—and in giving him a connected view of the relations of the whole subject, which require his attention. If the instructors in such an institution are enthusiastic in their vocation, honest and true to their duties, all these ends will be obtained. But besides these, who does not know the value of system in study, and of the assignment of a certain hour to certain duties ; and still more the importance of bringing those together who are prosecuting similar investigations, and causing mind to brighten by collision with fellow mind? This itself is of no small benefit. The youth feels the stimulus of laudable ambition, and enters with a generous and honorable rivalry into the field with his brethren. He lags not by the wayside, for he does not want to be recognized as inferior in abilities and diligence to his companions. Thus mutual emulation acts as the spur to the indolent, and a noble impulse to the industrious. If engaged in private study in the shop, he may easily be persuaded to relinquish his task for some other attraction, and no one will readily detect his negligence ; but if this is done here, the contrast is seen at once and odium rests upon him for it,—not only for the present but odium of that character which requires years utterly to irradicate.

In considering the utility of Colleges of Pharmacy, the subject naturally divides itself into three parts, relating to the different classes in the community interested in the matter. Let us then dwell for a short time upon each one of these divisions, and see how such establishments can be useful and protective to the Apothecary, the Medical Profession and the community at large.

I. We have glanced at the necessity of instruction, other than

that acquired by means of private study ; now we give as one of the main reasons for the establishment of colleges, the fact that the Apothecary himself cannot, for want of time, communicate to his apprentices the varied information which is required of them for the proper prosecution of their calling. He is aided greatly by the instruction his apprentices receive in the lecture room. His own time, unoccupied by the duties of the shop can be devoted to private researches which will redound to the increase of the general stock of knowledge. A spirit of earnest desire is promoted on the part of the apprentice, to thoroughly understand a subject, so that he can not only be an efficient aid to his employer, but may eventually become a *Master in Pharmacy* himself. He rises above the position of a mere machine for mortar and pestle work, for trituration and decoction-manufactures, for unguent and plaster spreading, to that of an intelligent and reliable vender and dispenser of medicines. Neatness and cleanliness in his work, required particularly in this business, are cultivated by one who hears them systematically enjoined upon him in the repeated instructions of his Professors. There is need for their existence as he finds himself thrown into daily contact with his fellow-apprentices, and appreciates the fact that in the future contest for success, the world will favor him that seems most deserving.

The Apothecary is not tied down to his counter, when his apprentices begin to obtain a knowledge of the business, at once theoretical and practical. He has intelligent aids and feels no reluctance in leaving in their hands his reputation as a pharmaceutist, which is in fact done when he confides the preparation of his patron's prescriptions to their care. He is in the position of being able to communicate freely with his brethren at meetings, held from year to year, at different points of the country, and there by an interchange of views contribute to the advancement of the general fund of knowledge. He knows, in leaving home, his business is left with prudent and intelligent hands, and that no detriment will ensure. The complaint of the members of the American Pharmaceutical Association from country-towns, that they are often unable to attend its meetings, on account of the uninstructed clerks to whom they would be obliged to confide their business during their absence, presents strongly the necessity of a strict and systematic course of study for said clerks. The Apothecary feels, without an intelligent corps of assistants, that his absence can never result in anything but detriment to the establishment, and hence he is prevented from knowing what is going on outside of his little home circle, and availing

himself of the aid and assistance, which would be conferred by it.

Again, the relation of employer and apprentice becomes more intimate and confidential, as the latter shows an increasing store of knowledge. The inducement to impart information is naturally greater, when the recipient is giving proof of his appropriation of what has been communicated before, than when the uncultivated mind is ignorant of the uses of such information. Hence as the apprentice returns from the lecture-room to his place behind the counter, he feels not only that he has gained some fact not known before, but that the things of which he is ignorant, are numerous and extensive enough to employ his whole life, and he is more willing to receive instruction from the employer than ever. His reading loses that desultory and trifling character which marks the early years of most men's lives. It becomes professional, and has some relations to the varied branches of science. The trifling and ephemeral literature of the day, does not hold out the attractions it did before he caught a glimpse of the brighter and more permanent beauties which science presents; and now if he is disposed to venture into the department of Belles Lettres, a more judicious selection of authors ensures him some real, substantial return for the time so occupied. But he finds that the history, nay even the poetry of science has the most attractive charms. Here he can combine the beautiful with the useful, and while laying up stores of knowledge that will come into daily use, he may gather flowers whose beautiful colors and fragrant odors shall please the eye and charm the soul of man. He becomes the better Apothecary, and the better citizen, for *every* man who has qualified himself with care in his peculiar calling, becomes an honor to the community, and of priceless value as a citizen.

And the well instructed apprentice, having closed his pupilage, and having commenced business for himself, will see from his own past experience how necessary it is that his own employés should have the same advantages and undergo the same character of training to which he was subjected. Thus generation after generation of men are fitted and trained for the profession, and its own dignity and importance increases with the increase of knowledge among its members. This is the case with all callings; we learn to respect them more as the dissemination of knowledge among their members produces an elevation of their position. An art always becomes more dignified when we find its cultivators understand the science which underlies it.

Another advantage of Colleges of Pharmacy is in the fact that they eventually become depots for the storing away of new contributions to knowledge, from which the profession itself can afterwards draw with greater confidence, than from any other available source, what has been done by its distant members. Journals occasionally give outlines of processes specious *in fact*,—may detail discoveries that are fallacious, as well as describe the new truths that have been garnered in by the patient and intelligent laborer. This is almost unavoidable. Their editors cannot always experimentally test the statements contained in the columns of other journals, nor even those of their own contributors. Hence this mode of diffusing information, so invaluable in many points of view, is liable to some objections, and cannot be compared with that, where the speaker not only announces the fact but experimentally demonstrates it, and satisfies the spectator both as to the result and the mode of operating to obtain it. The particular attention which is paid each to *specialite* would lead us naturally to expect a more perfect acquaintance with its progress from the Professor than from those who are more specific in their private studies. The constant frauds carried on in the drug trade must be here investigated, and whatever sure and reliable means can be adopted for their detection should here be explained in the clearest possible manner. This point alone has become so important that a separate chair in the college might find its time entirely occupied with the adulterations of drugs, as practised by unprincipled, ingenious foreigners and Americans. Fraud has crept in and most wickedly has adulterated those articles which are to be relied on as safeguards from disease. Without the aid of scientific advice the apothecary is unfitted to judge of its effects. Science has been brought to bear in the manufacture of the fraud, and without the aid of the former the latter cannot be detected. This one point alone would require a more intimate acquaintance with the principles of science, in order to keep pace at least with the detection of the rascality of the times. Physical properties no longer serve as true tests of the purity of a drug, because the taste, the color and the feel of the object may be perfectly imitated. We must go deeper into its examination to procure certain results. It may seem unnecessary to dwell upon the importance of this point, as those familiar with the subject will at once recur to countless forms of adulteration that have been invented during the past few years,—how quinia has been adulterated with starch, sugar, gum, sulphate of lime, mannite, stearine, margarin, salicin, cinchonia and a score of other articles, more or less

inert and all inferior in specific properties to those of the pure alkaloid. The process of adulterations has invaded even our common articles of food and drink, and ingenuity has been taxed to bring large profits into the manufacturer's pockets, while the purchaser foolishly imagines he is procuring a very cheap and reliable article. The series of adulterations found in the coffee sold to our brethren of the British isles will make the extent of this recognizable to every one. We are told,* that "the coffee dealer adulterates his coffee with chicory to increase his profits—the chicory-maker adulterates his chicory with Venetian red, to please the eye of the coffee dealer; and lastly, the Venetian red manufacturer grinds up his color with brick-dust, that by his greater cheapness, and the variety of shades he offers, he may secure the patronage of the traders in chicory."

The science required for the detection of pure drugs, it will thus be observed, is associated intimately with that required for the detection of adulterations, and this can be best obtained from those, as we have said, who have devoted their talents and energies to the study, and who, by constant and repeated practice, have acquired facility in communicating their knowledge.

One other argument on this point and we shall leave it. The instruction of the college is superior to that of the shop, because it occurs under circumstances when the mind of the student is not liable at any moment to be distracted from the subjects under consideration. While in the shop, however much may be the patronage it enjoys, there will be it is true, many hours of leisure which can be devoted to study, but there is always the liability of being called away just at the time when the investigation becomes most interesting. The mind cannot be so exclusively directed to the subject. But while in the college, the feeling that the hour has been set apart for a certain work, and that there is no probability of any intrusion, enables the student to devote his whole mental energies to the subject,—to take in everything relating to it. There is nothing to distract attention, and everything to induce it; his fellow students bent upon the comprehension of the subject, the preparations on the lecture table, the animated words of the speaker,—all these invite him to receive and master the principles of his calling.

II. But the establishment of Colleges of Pharmacy are of invaluable benefit to the Medical Profession. Now, no two classes of men are more intimately connected than Physicians and Pharmaceutists,—more absolutely dependent upon each other, according to the

* Johnson's Chem. of Common Life, I. 218.

division of duties which the progress of knowledge has determined to be necessary. In olden times, the two were combined in one person. Knowledge of the branches peculiar to both was by no means extensive enough to require a separation. The leech could compound the medicines that his studies had revealed to him, with as much certainty as the science of the times could furnish. But what was *that* science? Let us recollect this was in those days when all surgery was practiced by barbers, and that *it* was considered by no means as the most respectable of the barber's various employments. Let us recollect that this was at the time when the medical man required all possible mystery in order to keep the people from knowing his treatment, and to excite, as much as possible, faith in him and his remedies. But when his knowledge increased, it became evident that the preparation of medicines was an occupation of sufficient magnitude and importance to require the undivided attention of one person. The physician resigned this portion of his old duties, which had become rather irksome, since his attention was required by other branches of more immediate interest professionally; and, unless in country towns and villages, where circumstances prevent the separation of the prescription from the preparation of remedies, the two are kept absolutely distinct.

Who can have more interest in the thorough education of the apothecary than the physician? Is not his reputation concerned in the result of every prescription he makes, and which he confidingly sends to the shop for preparation? His adjunct in the proper management of disease is the apothecary; all his prescriptions are based upon the perfect fitness of the latter. The combination that he adroitly throws together, of substances, whose therapeutic properties his experience tells him are likely to produce the desired effect, is worthless, and it may be worse, unless the prescription shall be rightly interpreted and properly prepared. Is not, then, the education of the Pharmaceutist a matter of vital importance to the physician? The latter labors, from his first entrance into his preceptor's office, to acquaint himself with the structure of the human frame,—toils over the dissection table until its recondite mysteries are clearly revealed; scrutinizes carefully the functions of respiration and circulation, of digestion, assimilation, and excretion; examines the development of the mystery of life from its starting point, the wonderful organic cell up to its full completion—the adult man; studies how he may bring relief after injuries which produce results requiring surgical skill and the aid of the knife; investigates the mysterious action of remedies

upon abnormal actions and morbid substances in the human frame; constrains all branches of science to pay their homage to the court of Æsculapius, and with generous rivalry to pour out, from Cornucopiæ of treasures, rich and priceless gems for the aid of suffering humanity, too well satisfied if they can only be found available in the philanthropic exercise of the physician's art; devotes time, and talent, and assiduous labor to the investigation of disease and the alleviation of its most pressing and urgent wants,—finds nothing too much for him to give in order to compass the duties which devolve upon him, as a High Priest of Nature's inmost sanctuary. And all this, with inadequate returns, both pecuniarily and otherwise, for his mental and bodily labor, and sometimes met with contumely and reproach, because he cannot accomplish that which is impossible to fallible beings, and only within the reach of Omnipotence itself. I hesitate not thus to speak of the energy and self-sacrificing spirit of the medical profession,—and in this way to bear my own small tribute of respect and grateful admiration. Let them be honored by their fellow men with the rewards, which a due appreciation of their merits will demand!

With all the vast fund of knowledge possessed by the physician, he is still dependant upon the pharmaceutist for the completion of his arrangements in the treatment of disease. The latter is his constant and necessary associate,—the instrument for carrying out most of his conclusions and orders with reference to the sick. If the physician requires years of study to fit him for the treatment of disease, surely he requires that the dispensing apothecary should have a proper training as to the preparation of his prescriptions. His confidence in medicines will be of little worth, unless he can be assured that they will be furnished of a pure and unadulterated character, and compounded with accurate scientific skill. How often have not his most sanguine expectations been frustrated by the administration of a weak and adulterated article, instead of one of the proper strength and purity as contemplated in his prescription? The most serious results have also occurred from the ignorant mistakes of those who were unfitted for their business, and who have substituted some powerful alkaloid for a simple medicament prescribed. Where absolute dependance is so necessary, as in the relation of the physician and the apothecary, there should be no cause at all for the slightest ground of fear that *that* might be misplaced. Every thing demands the most thorough ability to represent the physician's order,—the sleepless eyes of the mother as she hangs

over the couch of her beloved, — anxious and excellent friends watching the crisis of disease,—sorrowing children hanging with all love and tenderness around a patient's bed,—the shriek of pain and the wail of affliction,—all demand it. Suffering humanity, that has placed itself under the care of the medical man and with an abiding confidence is awaiting the result of his thought and his advice, demands it. Nature herself, who has supplied alleviating cordials and healing balms, demands it. All that has to do with the secret emotions of man, with his hours of affliction and suffering, with his relations to nature and his fellow man, requires that the apothecary should be "*an intelligent adjunct to the physician in combatting disease.*"

Now as we have shown that proper preparation can best be obtained in the College of Pharmacy, we trust that the point is proven, of how great an utility these institutions are to the regular practising physician. We can well understand the sound judgment which dictated such language as the following in "the Address to Druggists and Apothecaries," adopted by the American Pharmaceutical Association, that the apothecary "should cultivate a good feeling toward the medical practitioners of his neighborhood, should study the interest of the latter, so far as the efficiency of medicines is concerned, and physicians will soon, from interest, incline toward him." We may add a still more powerful motive for such patronage on the part of the physician, and say that from *necessity* it would be conferred. The reliable apothecary is an invaluable treasure to the physician, and he will, by a natural course of things, find him out. It is as a shield and protection against deplorable ignorance and bungling inexperience that he will patronize him, and throw the weight of his influence for the support and maintenance of his shop. The ammunition required in his continuous warfare with disease must be supplied from an arsenal, where all is kept in efficient, working order.

Is it too much, then, to ask that medical men should acknowledge their anxiety to have a host of scientific apothecaries—a band of reliable dispensers of medicine—by lending the countenance of their influence to every attempt, well-conceived and judiciously-planned, for the foundation of a College of Pharmacy? It is as necessary that the most convenient and available means be adopted for the proper education of the pharmaceutist, as it is that every effort should be used to increase those for the training of the physician, at least so long as prescribing and dispensing shall be the duties of two dif-

ferent persons. We claim that the physician should give every aid and encouragement to such changes; and that he should discountenance all those who have disdained to employ the advantages of these colleges, where such have been placed at their disposal, full as much as he would hesitate to consult with one who had not passed through a medical college in the preparation of his preliminary education. This, of course, applies to cases where collegiate advantages have been within reach of the pharmaceutist. Where this has not been the case, the physician will always discriminate between him who has fitted himself by the advantages within his grasp, and one who has neglected so to do.

III. Lastly, we wish to dwell for a few moments on the utility of Colleges of Pharmacy to the community at large,—or rather, on the importance of having educated pharmaceutists to dispense the prescriptions which the attending physician has ordered. It is not only the matter of reputation with these, as with the pharmaceutist and the physician, which makes it desirable that a high character of education should be established for the dispenser of drugs. Life is often concerned. A mistake is not only an indication of ignorance on the part of the apothecary, but it may be death to the patient. The possibility of such an event as the fatal termination of a case, where a wrong drug has been substituted for the proper one, may not only exist, but quite a number of cases, illustrative of this, have occurred. The newspapers, from time to time, tell us how strychnia has been substituted for morphia, oxalic acid for sulphate of magnesia, arsenic for a number of white powders, which it may resemble in physical qualities, and other blunders of a similar kind, and how the mistake has resulted in the loss of life. We say there is no protection for the community, when implicit reliance is placed in a pharmaceutist who is ignorant of his business, and the sciences on which it is based. It is like permitting a man to walk through a cellar, where a great quantity of powder has been stored away, with a lighted candle. He may pass through, time and again, and no evil result; but the time may come when a spark shall ignite the powder, and destruction will be certain. The danger, however, of such a result, is always imminent. And the ignorant apothecary may dispense medicines for a long time, and no harm result; yet, there is a fear always to be felt, that the time may come when a sad result may attend such ignorance. We need not only expect that the people will recognize in a negative way the necessities of Colleges of Pharmacy, but rather expect to see them demanding them most positively from the profession itself. The

health of friends and families depend upon it; the prescriptions of the physician are null and void without the educated ability to put them up. While they demand that their medical attendant shall know his business thoroughly, they should in all justness and fairness ask the same of his adjunct.

Then, as a protection from the injurious effects of ignorance, we do not hesitate to claim the support of the community at large to all such enterprises. As wide a difference exists between him who intelligently prosecutes the business of the pharmaceutist and the mere bungler, as between the preparations which the pharmaceutical chemistry of the present day furnishes us, and the horrible decoctions which superstition prepared centuries ago, with all imaginable terrifying rites, for the cure of disease. In the one case there is truth and certainty—in the other ignorance and stupidity.

Not only may positive injury be inflicted by the substitution of powerful drugs for weaker ones, but the opposite substitution may result fatally in cases where the immediate action of a powerful one was required. Again, reliance can only be placed in the apothecary for the purity of his stock. If inert impurities are present, which is mostly the case where adulterations are employed, then we have the second difficulty just named. In any case, the effects of both the medicine and disease are trifled with, and all because the individual dispensing them has not properly fitted himself for his business. The community is bound in self-defense to further the interests of institutions for this kind of instruction.

Selections from Favorite Prescriptions of Living American Practitioners. By HORACE GREEN, M.D., LL.D., &c.

Excitants and Alteratives.—(Continued.)

Among the remedies obtained from the organic or vegetable kingdom, are several therapeutic agents that are not found in many foreign pharmacopœias, but which are much employed, and are held in high estimation by many American Practitioners. Among these may be mentioned the *Sanguinaria Canadensis*, the *Actæa Racemosa*, or *Cimicifuga Racemosa*, as this plant is named by some botanists; and the *Veratrum Viride*, or *American Hellebore*.

The Sanguinaria, or bloodroot, has been long employed as an excitant and alterative, and is a favorite remedy with many practi-

tioners in New England, and in the Western States. It is ordinarily administered in the form of tincture; but the officinal preparation of our pharmacopœias (four ounces of the root in two pints of diluted alcohol,) is nearly an inert preparation; and, as this is the strength of the tincture ordinarily kept and dispensed by our apothecaries, we have long been of the opinion, that the disappointment in the effects of this remedy, which has occurred to many practitioners, has arisen altogether from the fact, that they have prescribed a preparation too weak to be efficient. We have used the Sanguinaria in the treatment of disease, during a period of many years, but we have always employed the *saturated tincture*, (four ounces of the bruised root macerated in *one* pint of diluted alcohol,) and we can speak with much confidence with regard to its valuable therapeutic properties.

The following combination of the bloodroot, with the compound tincture of aloes, is employed by some experienced practitioners in Ohio, in the treatment of a torpid condition of the bowels, arising from a derangement of the hepatic organs, and is esteemed an excellent eccoprotic:

℞. Tinct. Sanguinariæ. Sat.
Tinct. Aloës Comp. p. æ.
Fiat Mistura.

From 30 to 60 drops of this preparation may be administered twice, daily. It tends to improve the digestive organs, and to increase the peristaltic action.

℞. Tinct. Sanguinariæ. Sat.
Vini Ipecacuanhæ p.æ.

to which, in some instances, a little laudanum is added.

The above combination is employed by many Western practitioners, in the treatment of fevers, and is considered by them a most excellent *febrifuge*. But, it is in the treatment of some forms of cough, dependant upon bronchial or pulmonary irritation, that we have found the saturated tincture of Sanguinaria to be a remedy of the highest excellence.*

* The following is the original formula for the preparation of "Ayer's Cherry Pectoral:"

℞. Morph. Acetat. - - gr. iij
Tinct. Sanguin. Canaden. ʒij
Vini Antim. et Potass. tart.
Vini Ipecacuanhæ - aa ʒiij
Syrupi. Pruni Virgin. - ℥iij
M.

℞. Tinct. Sanguinariæ. - - ℥i
Tinct. Opii. - - - ℥ij
Vini Ipecacuanhæ, - ℥vj
Syr. Tolutan. - - ℥ij

Fiat mistura, quorum capiat M. xxx usque ad lx quater in die.

In catarrhal affections, and in cases of troublesome cough following influenza, the above preparation may be given with much advantage.

We have employed the preceding mixture for many years, to mitigate the cough in the early and in the advanced stage of phthisis.

Should the cough be dry, or much inflammatory action be present, antimonial wine may be substituted for the syrup of Ipecac, and less of the anodyne be added, as in the following:

℞. Tinct. Sanguinariæ. - ℥i
Morph. Sulph. - - gr. iss
Tinct. Digitalis - - -
Vini Antimo. - - aa. ℥ss
Ol. Gaultheriæ. - gtt. x
Misce.

This may be administered, as above, in doses of from 20 to 40 drops twice or thrice, daily.

We are assured by an old and experienced physician of this State, that he has succeeded in overcoming habitual constipation more frequently with the following pill, than with any other laxative:

℞. Sanguinariæ Pulveris.
Rhei Pulveris. aa. ℥j
Saponis. - ℈ij

Misce. et cum aquæ fiat mass. in pilulas xxxii dividenda, quorum capiat una mane ac nocte.

The *Actæa Racemosa*, or *Cohosh*, or *Black Snakeroot*—names by which this plant is sometimes called—is a native of the United States and of the Canadas. It has been employed as a popular remedy in this country, for many years, for the treatment of pulmonary diseases, rheumatism, chorea, anasarca, etc. Early in the present century, a nostrum, or secret remedy, which obtained great celebrity in many of the New England States, on account of its success in the treatment of rheumatism, was composed principally, as it was subsequently ascertained, of a saturated tincture of actæa racemosa.

We find this remedy to be held in high estimation by many excellent practitioners from different parts of the United States, for the treatment of the above named, and other kindred diseases. During a period of more than twenty years, we have employed the actæa as

a therapeutic agent, either alone, or in combination with other remedies, with great advantage.

It is best administered in the form of tincture, but it may be given in substance or in decoction. The *saturated* tincture (four ounces of the root to *one* pint of alcohol,) should only be employed. It may be given in doses of from twenty to forty drops, repeated every two or three hours, in the treatment of acute rheumatism.

Its powers in rheumatic affections, and in anasarca, are greatly increased by administering it in the following combination:

℞. Tinct. Actaæ Racemosæ.- ℥i
Potassæ Iodid - - ʒij
Syr. Ipecacuanhæ - - ℥i
Aquæ font. - - ℥ij
Misce. d. coch. parv., bis terve in die.

In chronic bronchial disease, and in the early stage of phthisis, it has been proved to be an excellent and efficient remedy, when combined with an anodyne, and the tincture of Sanguinaria.

℞. Tinct. Cimicifugæ Racemosæ.
Tinct. Sanguinariæ - aa ℥i
Morph. Sulph. - gr. ij
Syr. Acaciæ. - - ℥ij
Misce. quorum exhibe coch. parv., tusse urgenti.

In the treatment of *chorea*, the *cimicifuga* has been extensively employed in the United States.

After free purging for several days, preparatory to its use, many practitioners depend altogether upon this remedy for the cure of chorea. By some it is administered in the form of decoction.

℞. Cimicifugæ Racemosæ - ℥j
Aquæ Ferventis - - Oj
M. ut Fiat, Decoction. cujus sumat, coch. mag. ij ter in die.

Other practitioners prefer the use of the powdered root, administering it in doses of a teaspoonful three times a day.

In the treatment of dropsy, the following is a preferred prescription, and has been much employed by an experienced practitioner in Massachusetts:

℞. Tinct. Cimicifugæ Racemosæ. ℥j
Tinct. Myrrhæ.- - - ʒvj
Tinct. Opii. - - - -
Tinct. Capsici. - - aa ʒj
M. Fiat Mist. Capiat M. xxx *vel* xl. quater in die.

The *Veratrum Viride*, or American Hellebore, is found in various

parts of the United States, and is a native also of the Canadas. The plant is known in some places as *Swamp Hellebore*, *Indian Poke*, &c., and is found growing in swampy places, in meadows, and along the borders of water courses. It belongs to the same order of plants as the Colchicum Autumnale, and was highly recommended, many years ago, by Professor Tully, of New Haven, as a substitute for colchicum in the treatment of many of those diseases for which this latter remedy has been employed. Within the last few years, public attention has been called especially to the remedial powers of the veratrum viride, by Dr. W. C. Norwood, of South Carolina, who has devoted much time and careful attention to ascertain the nature, properties, and uses of this powerful remedy; and whose vast experience in its use, he declares, "fully justifies him in confidently assert, ing to the profession, that it stands unrivalled as a curative agent." The experience of Dr. Norwood as to the effects of veratrum in disease, has been corroborated by some of the most eminent physicians of the Southwest. In a paper read before the Tennessee State Medical Society, and published subsequently in the *Nashville Journal of Medicine and Surgery*, Professor C. K. Winston asserts that the veratrum viride is an arterial sedative of high power; that the most remarkable and, at the same time, the most important physiological effect of the remedy is the reduction of the heart's action. The pulse, he affirms, may be reduced by the veratrum, "from 130 to 40 beats in the minute, with entire safety to the patient, and without the least injury to the circulatory or nervous system."

Employed in the early stage, before the occurrence of organic lesions, the veratrum viride is peculiarly adapted to the treatment of pneumonia, pleurisy, rheumatism, typhoid fever, pulmonary inflammation; and, in the phlegmasiæ generally it is regarded as more or less valuable. In a pamphlet recently published by Dr. Norwood, on the "Therapeutical Powers and Properties of Veratrum Viride," the author reiterates his confidence in the great value of the remedy, and appends the favorable opinions of many eminent physicians of the South and West, who have employed the veratum with great success in the treatment of disease. "We rely on it," writes the author- "as the remedy in typhoid fever, and administer it with every assurance of success. We put the patient on the free use of it, and press it till every symptom is controlled or arrested. Our plan is to reduce the pulse to between 55 and 75 beats, and keep it at the point desired night and day. In some cases, it should be reduced at least to the natural standard, if not below it. By this kind of reduction the

febrile and inflammatory symptoms vanish, and the patient is kept quiet and tranquil and comfortable."

In Pneumonitis, Dr. Norwood "considers it as much a specific as quinine is for intermittent fever;" and in combination with diuretics in the treatment of scarlet fever, he "finds it superior to all other remedies he has ever tried." With regard to the power of the veratrum viride to reduce the heart's action, no doubt whatever can remain.

We have employed the remedy frequently since 1851, when Dr. Norwood gave us a quantity of the tincture prepared by himself. It has never failed in our hands, when properly administered, to diminish arterial action. In one instance of tuberculosis, a pulse of 120 was reduced to 58 beats in a minute, and kept steadily at that point day after day. Its effect, as an arterial sedative, has been fully tested by our colleague, Professor Carnochan, on many of his patients in the Emigrants' Hospital. In one case, a pulse of 130 was reduced 68 in fifteen hours; and in a case of articular rheumatism, the exhibition of the tincture in doses of from five to eight drops every three hours, a pulse of 120 was reduced to 30, in fifteen hours.

The saturated tincture, "made by macerating eight ounces of the dried root in sixteen ounces of alcohol for at least two weeks," is the form in which the remedy is usually employed.

In the following combination, the tincture is administered by Dr. Norwood:

℞. Tinct. Veratri Viride.
Syrupi Scillæ p. æ
Misce intim.

Of this mixture to an adult male, Dr. Norwood advises to begin with from four to six drops, increasing the amount from one to two drops at each subsequent dose, until the pulse is reduced, or nausea and vomiting are occasioned, when the medicine is to be diminished one-half, and continued so long as may be necessary to prevent a return of the symptoms. In females, commence with from three to four drops, and increase the above until the necessary result is obtained.

When administered to children, the remedy is given in the following proportions:

℞. Tinct. Veratri Viride. ℥ss
Syrupi Scillæ. - ℥jss
Misce bene.

From two to three drops of this combination may be administered to children (from one to two or three years old) according to the age, increasing one drop at each subsequent portion, until arterial action is reduced, or nausea or vomiting occasioned.

When the veratrum is administered too freely, nausea and vomiting will, in some instances, be very severe, and will be attended with prostration, and great coldness of the surface. When these symptoms occur, they are promptly relieved by the administration of an opiate, and brandy or any of the alcoholic stimulants.

Moral Insanity.

The subject of moral insanity, through its introduction as a plea of defence upon a late celebrated criminal trial, has become invested with a strange interest, both professional and romantic.

Anticipating that a brief account of this affection, as at present understood by our best authorities, will be of interest to our readers, and appropriately precede any review we might hereafter make of the psychological aspects of that trial, we have prepared the following:—

Moral insanity, as a distinct form of mental disease, was first brought into notice by Pinel, who found among his cases of insanity, a certain number presenting no delusions nor any apparent alteration of intellect, and yet exhibiting, as he said, a perversion of the manifestations of the will, in a blind impulse to violence or rage. It was denominated by him, *manie sans delire.* Succeeding Pinel, we find Esquirol, Georget, Hoffbauer, Prichard, Ray, and others, advocating and developing this idea, until, as defined by Prichard, with some limitation as to the complete integrity of the intellect in this affection, moral insanity has come to be almost generally recognized. He defines it as "consisting in a morbid perversion of the natural feelings, affections, inclinations, temper, habits, moral dispositions, and natural impulses, without any remarkable disorder, or defect of the intellect and knowing and reasoning faculties, and particularly without any insane illusion or hallucination."

The theory of moral insanity as thus stated, however, has not been unquestioned. In opposition to its acceptance, it may be sufficient to quote such names as Moreau, Falret, Foville, and Heinrich. Even its supporters are not unanimous, as we have said, as to whether the intellectual faculties are really uninvolved in it or not.

Like other forms of insanity, it is spoken of as general or partial, according to the extent of the invasion of the moral faculties. Before alluding particularly to the characteristics of general moral mania, we would mention that in almost all cases some physical dis-

ease precedes its appearance, and to the lesions produced by which it may be directly referred. Thus, upon investigation, it may be found to date from some attack of epilepsy, or palsy, or some cerebral or inflammatory disorder, materially affecting the whole constitution, as it is called, of the individual.

We should expect, then, to find in one laboring under moral insanity, a marked change in the susceptibility or capacity for feeling. The same objects or influences would not affect him in the same way, or degree, as before. He would feel them, it might be more or less keenly, but certainly not in the way usual to him. And not only would it be a change in degree, but of nature, so that the feelings would be most likely the very reverse of those natural to him in a state of health. For instance, if once a kind, domestic, friendly man, he would become the social tyrant, full of bitter hatred and malevolence towards his nearest and dearest friends, seeing in their kind offices nothing but efforts to injure and annoy him, and visiting upon their heads the whole catalogue of his woes.

This revulsion, causeless and complete, of one's natural feeling towards family and friends, has been always esteemed an important diagnostic sign of this affection.

Again, we should expect to find the habits, temper, principles, and inclinations revolutionized, and always deteriorated. Sobriety, integrity, and virtue, we should look to see displaced by vices directly their opposites, and elevating aims for life sunk in degrading immoralities. If before mild, modest, and silent in his deportment, he would now become bold and loquacious. The least contradiction would irritate him; he would gesticulate forcibly, talk rapidly, and argue well, ascribing the advice and conduct of others to sinister motives, and explain his own plans, acts, and failings plausibly and ingeniously, however absurd, or cruel, or reprehensible they may have been.

In some the excitation of passion and feeling appears a permanent condition, manifesting itself similarly to that produced by the use of alcoholic drinks. In others the disease is marked by periods of several weeks duration, of alternate exaltation and depression. Under these two forms, the continued and the alternating, may symptomatically be arranged, nearly all the cases of general moral mania.

In some, the religious element enters as a prominent feature in the case—the individual affecting extreme piety, and at the same time making by his acts and words mere mockeries of "things divine." In regard to their temporal matters, some of the strangest inconsist-

encies are frequently met with. Plans of the wildest and most visionary character may engage the attention, and yet be accompanied by the most sanguine hopes of their success. Great objects for the benefit of the human race may occupy the thoughts for one day, and be changed the next for grand schemes of personal aggrandizement.

The foregoing imperfect description, drawn mostly from nature as exhibited in the few cases of this disease, that have fallen under our notice, may be appropriately followed by that of Esquirol, who thus graphically portrays the characteristics of general moral mania :—

"In reasoning monomania, the patients are active, and constantly in motion ; converse much and with vivacity. They were amiable, frank, generous; they have become peevish, deceitful, wicked. They were full of affection towards their relatives ; they are now discontented, and speak evil of those they once loved, and fly from them. They were provident ; they are now profuse. Their actions were regular ; they are now inconsiderate, adventurous, and even reprehensible. Their conduct was suited to their state and social condition ; it is now irregular, and in no respect suited to their position and fortune. Motives always determine them. By their deportment and conversation, these persons impose upon those who were not acquainted with them previous to their illness, or who see them for a brief period only ; so well do they know how to restrain themselves and to deceive."

That blind instinctive impulse, which prompts to the commission of crime is described under the head of partial moral mania. In this, many divisions are made, depending upon the particular propensity or passion which predominates. Thus we have described by writers :—

Homicidal mania (morbid propensity to kill).
Suicidal mania (morbid propensity to self-destruction).
Pyromania (morbid incendiary propensity).
Kleptomania (morbid propensity to steal).
Pseudonomania (morbid lying propensity).
Oinomania (morbid propensity to drink wine).
Aidoiomania (morbid sexual propensity).
Oikeiomania (morbid state of domestic affections).

Various synonyms to the above terms have been employed by writers, and several other forms mentioned, which are here omitted as tending to cast no additional light upon the subject. It is evident that any particular propensity may, by a rank and inordinate

growth, overtop all the rest. The influence which it would therefore exert upon a particular course of action, or a life generally, would be overshadowing and powerful. If evil in its origin, its developments would be towards criminality. But the apologist of crime cannot thereupon coin a new term, and say we have here an addition to make to the forms of partial moral mania already found enumerated. Until such propensity be established as the offspring of disease and the result of a morbid condition of the brain, it cannot be thus admitted. A careful analysis of all the symptoms, a thorough and complete knowledge of the previous history of the case, and a practical acquaintance with the operations of the mind when affected by disease, are necessary for this diagnosis.

Of the different forms of partial moral mania, that of homicidal character has been most carefully observed, comes most frequently under consideration of the courts, and is the most generally recognized by writers. Esquirol, describing this form, says, "These maniacs perceive, compare, and judge correctly, but they are drawn aside from the slightest cause and even without an object, to the commission of acts of violence and fury. They are *irresistibly* impelled, they assure us, to lacerate and injure themselves, and destroy their fellow beings. These wretched persons have a consciousness of their condition, deplore their situation, warn their friends to protect themselves against their fury, or place them where they can do no harm."

The homicidal act of the real criminal, is to be distinguished from that of one laboring under this form of insanity, by learning the family predispositions to disease, the temperament, the habits, the physical diseases of the individual, the manner of and motives for committing the act, the conduct pursued after commission, and observing if any marked change has occurred in the general character. In most cases there is some physical disease which precedes its development. On this point Dr. Ray justly remarks :—"In nearly all, the criminal act has been preceded, either by some well marked disturbance of the health, originating in the head, digestive system, or uterus, or by an irritable, gloomy, dejected, or melancholy state, in short, by many of the symptoms of the incubation of mania. The absence of particulars in some of the cases we find recorded, leaves us in doubt how general this change really is ; but a careful examination, would no doubt often, if not always, show its existence, where *apparently* it has never taken place."

Although the foregoing brief account of moral mania may be

sufficient for the object intended, yet it seems proper to point out some of the normal conditions of mind with which it might be confounded.

Eccentricity may closely resemble insanity, but if a perfect record be obtained, the psychological physician can hardly fail to recognize and distinguish these conditions. It may accompany this affection, but even then, some noted change in the conduct will be observed, and unmistakable signs of organic disease be found.

Dr. Taylor, who includes moral insanity under the head of monomania, gives the following characteristics :—"In monomania, there is obviously a change in character, the individual is different to what he was : in eccentricity, such a difference is not remarked :—he is, and always has been, singular in his ideas and actions. An eccentric man may be convinced that what he is doing is absurd and contrary to the general rules of society, but he professes to set them at defiance. In eccentricity there is the will to do or not to do, in real monomania the controlling power of the will is lost." In determining the condition of mind, it is indispensably requisite that the individual be compared with himself. "Tot capita, tot sensus." Dr. Ray remarks that, "Some men's ordinary habits so clearly resemble the behavior of the mad, that a stranger would be easily deceived."

Moral turpitude also, must be distinguished from moral insanity. In one, passion is the vice of character ; in the other a result of disease. If the passions be indulged from early life, the conscience becomes blunted, and a feeling of guilt is hardly experienced from the commission of the greatest crimes—the mere act, or repetition of acts, unless shown to be entirely motiveless, being no evidence of insanity. On the contrary, a marked and decided change in the character of an individual suddenly occurring, and connected with some physical nervous disease, is strongly indicative of a disordered mind. While the one has a real knowledge of the relation of things, and possesses the power of deciding, although his propensities be strong, the other no longer has this power. The agency of the will, whether free or otherwise, decides as to the character of the act. M. Guislain says, "So long as the patient preserves the consciousness of his acts, and at the same time his *free will*, he is not insane, although he may experience a disorder in his ideas." M. Brière de Boismont, has termed moral mania, "Folie d' action," which name gives a very good idea of its specific distinction. A change in conduct being essential, a brief examination cannot furnish the necessary facts for a correct diagnosis. Pure moral mania (if such a disease

ever exist) can only be recognized by an accurate knowledge of the previous history of the individual. Most authors however agree in the opinion, that the intellectual faculties are more or less involved in moral insanity; consequently, a brief examination might detect a delusion resulting therefrom. The following quotation is given from Dr. Forbes Winslow, who is noted for favoring the plea of insanity in criminal cases:*—"The moral part diseased, and the intellectual part sound and intact, is a condition that the human mind never presents. In such a sense, we should deny that moral insanity, as a disease, exists. Show us a man whose moral you say is diseased, but whose intellect is always clear and uninfluenced by his moral abnormity, and we will answer, that since it is the function of our intellect to weigh what is wrong against society, and to direct aright the actions prompted by the moral, that man is responsible for his conduct to his fellow men, but we deny that such a man is insane; we deny that he is diseased."

The characteristics of intellectual insanity are delusion and hallucination, but to determine their existence, the examination must be conducted with great care. The moral qualities being more especially affected, the change in the intellectual might be readily overlooked. The skilful and scientific psychologist approaches a decision in these cases, not rashly, but carefully and with a full sense of all the difficulties that surround it. The determination of the question of responsibilty, or irresponsibility is delicate, perplexing, but not impossible. With the principles for our guidance laid down by Feuchtersleben on this point, we close our remarks

He says:—"He who is psychologically free, in a medical sense, is liable to responsibility, and vice versa. This definition is decisive and universally valid, when the decision of the physician is required, for it is only that psychological freedom which is identical with health, that belongs to his province. It is on that alone, that he has to give his opinion; there is here only one will which is not free, namely, that which is fettered by disease, no quarter free, or half free will. Passion, bewilderment, want of education, enthusiasm, &c., may indeed impede self-government; but the will, in these cases, is only morally, not physically fettered; that is, it is free in a psychologico-medical sense. Neither passion, nor emotion, nor habit can exclude imputability." "This standard must be maintained, if we would avoid falling into the extreme of ultra-philanthropic toler-

* Psychological Journal, No. xxx., page 215.

ance, which now and then flatters the tendencies of our age. This extreme would in science neutralize the endeavor to lay down definite boundaries, and, in life, would aid vice and crime in their escape to a convenient city of refuge."

REVIEWS AND BIBLIOGRAPHY.

"Nullius addictus jurare in verba magistri."

Handbook of Chemistry for the use of Students. By W. GREGORY, M.D., F.R.S.E. Edited by J. MILTON SANDERS, M.D., L.L.D. 2 vols. New York: A. S. Barnes & Co. 1857.

The accumulation of Text-books and Treatises on the subject of Chemistry has become almost appalling to those who give their attention to this specialitè. Our shelves are speedily crowded with books of this character, written with all degrees of merit, from the miserable compilation of Comstock—at one time the terror of all village school-boys and girls—through various grades up to the late publication of Gmelin's Handbook, that grew, without any attempt at prolixity, to the capacious dimension of twelve volumes, nine of which in good English dress have been given to us by the Cavendish Society. And yet, notwithstanding the replete condition of our shelves, we anxiously seize every new book on the subject, with the hope that it may be free from the defects of its predecessors, and that more system and order may be exhibited in the arrangement, and that the neophyte shall not be intimidated at a seeming *rudis indigestaque moles.* How often are we not disappointed on an examination of the new comer? Like bubbles of Phosphuretted Hydrogen, which, as *Jack wi' the Lanterns,* delude the bewildered traveller into marshy grounds, where he finds nothing of the attractive light that first met his gaze, but plunges about in utter darkness—like these gay deceivers from Nature's Laboratory, most of the *new* Text-books on Chemistry are simply attractive from their exterior, containing nothing within which will satisfy the expectations founded on the external attractions.

Chemistry is so emphatically a science of progress, that systems for teaching it must be reconstructed from time to time so as to make them sufficiently comprehensive to include at least the most impor-

tant facts, which have been acquired by modern research, and the laws which underlie these. If an author neglects to admit the changes which new discoveries make so necessary, or if he refuse to keep his treatise up with the progress of the science, it is right that it should be displaced in favor of other and better treatises. Any cause indeed that will make a Text-book fall below the gradually-rising standard of what such a Treatise should be, will ensure its banishment from the student's table.

At this present time, there is great need of a text-book on Chemistry, well fitted for the use of medical students. Turner has become obsolete, because the work grew by the accretion of external particles which various editors had plastered on until the beauty and symmetry of the original was hidden amid the mass of additions and could no longer be recognized; Grahame, in the first edition of his Chemistry, introduced a new species of text-book—profoundly scientific and yet clear and charmingly interesting. This characteristic was retained in the second edition of the first part, but the publishers have announced the second part as "*preparing for publication*" for more than six years, and we suspect his comfortable berth in the Royal Mint has given him a distaste for work. Regnault's Chemistry is a good treatise on Inorganic Chemistry—a species of Encyclopædia of the most important principles of this branch of the subject, but the portion devoted to Organic Chemistry is disproportionately small, and is defective as a treatise for the medical student. Fownes—the best treatise of its size—needs a reconstruction of the Organic as well as the Physical portion. Just at this crisis, the fourth American edition of Gregory appears, and we greet it with much pleasure, as more nearly approximating what we wish for the profession than any of its predecessors. The book is well edited by Dr. Sanders, who has written, by way of an Introduction, an account of the Imponderables, which Dr. Gregory had not comprised in the English edition. It seems necessary to prefix to our American text-books on Chemistry some account of what has been properly called the Physics of Chemistry—and we are very well pleased with the manner in which the editor has accomplished this part of his task, although we feel inclined to differ with him as to the propriety of consuming 40 pages on the subject of Photography, while he only finds room for $1\frac{1}{2}$ on Frictional Electricity. Were the treatise one on Applied Chemistry, the lengthy discussion of the former subject, with details of the practical operations of the art, would not be out of place—but in a book specially intended for our profession, an author should

be particularly jealous of consuming much space on subjects which are not of direct importance in medicine.

The articles on Light and Heat are written with great clearness and present, in a condensed form, the modern views on these subjects. In treating of Physiological Electricity he mentions the experiment with which the papers were lately filled, of removing mercury from the human system by galvanic electricity, and a case is cited, as having occurred under his own observation, where he says, the feet, being placed in a foot-bath containing some water acidulated with hydro-chloric acid, were allowed to rest on a polished plate of copper, to which the negative wire of the battery was attached, while the positive was grasped by the patient's hand. In an half hour, the copper plate was found to be covered with a white substance which proved to be minute globules of mercury. We have never had an opportunity for testing this process for the removal of mercury, and although our incredulity is very great as to the feasibility of the proposed method, yet the respectability of the witnesses as to its efficiency and the known facts with reference to the decomposing power of Galvanic Electricity, force us to admit its possibility. It were well if some experiments were made by the profession on this subject, and the results, said to be obtained by the process, either confirmed or absolutely denied.

Dr. Gregory's portion of the first volume, comprising a consideration of the elementary constituents of matter, has been prepared with that care and judgment, which show a combination of thorough knowledge of the subject with large experience as to the wants of medical students. No space is consumed in useless discussion. Those subjects which have specially attracted the attention of chemists, within the last few years, such as aluminium, are treated at sufficient length to give a very good idea as to the true mode of their preparation and their real properties. His description of that type of polybasic acids—phosphoric acid—contains a very clear and intelligible statement not only of Grahame's view with reference to its three modifications, but also of Liebig's much simpler theory. Our readers are conversant, we presume, with the former, which assumes that *mono*, *bi*, and *tribasic* phosphoric acids are simply hydrates of the anhydrous PO_5, which being once established they acquire the property of combining with 1, 2, or 3 equivalents of base. Liebig's view is not so generally known, and Gregory has represented it here very fairly; the three acids are considered "as radically different, being formed of hydrogen, united in each to a different compound

radical; and that as in the first there is only 1 eq., in the second 2 eqs., and in the third 3 eqs. of hydrogen, the salts must necessarily contain equivalent portions of metals, which in the two latter may replace the hydrogen either wholly or partially, as in other polybasic acids." The following formulæ will represent Liebig's view of the composition of the three forms of Phosphoric acid and their salts:

Monobasic Acid.		*Bibasic Acid.*		*Tribasic Acid.*	
Acid.	Salts.	Acid	Salts.	Acid.	Salts.
PO_6,H;	PO_6M.	PO_7,H_2;	PO_7,M_2.	PO_8,H_3;	PO_8,M_3.
			$PO_7\left\{\begin{matrix}M.\\H.\end{matrix}\right.$		$PO_8\left\{\begin{matrix}M_2.\\H.\end{matrix}\right.$
					$PO_8\left\{\begin{matrix}M.\\H_2.\end{matrix}\right.$

There is one remark to be made *against* the arrangement of the Inorganic Chemistry—that the author has described all the oxy-salts under their generic names at the end, instead of considering each under its proper metallic source. We know that this plan has received the sanction of Turner, but every teacher must have felt its inconvenience. When the subject of any particular element is under consideration, the student should have a connected view of all its compounds. If those compounds, which are known as Haloid salts, are to be studied along with the respective metals, why not also the oxy-salts? If their consideration is to be left until the whole of the elements are gone over by the student, he loses his interest in their study. It may be well that students should learn the *generic* properties of sulphates, carbonates, nitrates, nitrites, &c., but it is of special importance that the *specific* characters of the various articles of these groups should be thoroughly studied in connection with their metallic sources. Gmelin has followed the plan of including under the consideration of each element all the compounds which belong to it, and those who have used his invaluable Handbook for daily reference will testify to the value of such an arrangement.

We must make one other remark as to "*the display*" of the book, which will apply to both volumes. It is very convenient in using a book for reference or study, that the type, with which it is printed, should have such a difference in size, that the different divisions, subjects treated, &c., could be recognized at a glance. Desilver's sixth edition of Johnston's Turner is well printed for this purpose. We are able to find what we want, and very quickly. Now, this edition of Gregory is beautifully printed on unexceptionable paper, but the Publishers will allow the suggestion that, in another edition, they will confer a great favor on those who are to use the book

constantly, if they will aid them in the use of it by employing type that shall show, at a glance, the different divisions, the names of the elements and their compounds, and relinquish the present size which is scarcely distinguishable from the text.

The volume on Organic Chemistry, we take it, is the best that has appeared for the use of the medical student. Dr. Gmelin has not occupied his pages with lengthy discussions on the various theories, which have been proposed and warmly discussed by the best scientific minds of our day, as to the true rational formulæ of organic compounds. It is right that the student should know what the theory of Compound Radicals is, as supported by Liebig and Berzelius, and should not be ignorant of the "Theory of Types" and the "Law of Substitution," but he cannot afford the time required for the discussion of these subjects to any length. He wants the facts of Organic Chemistry—the properties of organic bodies and, as far as possible, the *rational formulæ*. But if either is to be neglected for want of time, it is the latter; he can submit to an *empirical* formulæ better than he can to an ignorance of the properties of an organic substance. Unfortunately, classification, naturally difficult in a branch which is but in its infancy, has invested Organic Chemistry with much to intimidate the student. He fears to enter such a maze, lest he may become inextricably involved. Gregory adopts Liebig's theory with regard to compound Radicals because it has "the advantage of uniting those substances which are naturally allied in composition." The whole arrangement seems to us, without really being able to stand the test of close scientific scrutiny as to merit on the score of accurate classification, to be one that every student will find exceedingly convenient for study. The author discusses, at sufficient length, the organic acids, oils, fats, resins, coloring and extractive substances, organic bases, non-nitrogenized and nitrogenized vegetable principles, and closes with a concise examination of the composition of the organic proximate principles, the fluids, secretions and excretions of animals, and a very useful series of considerations on the nutrition of plants and animals. Dr. Gmelin is always accurate and reliable, and we are satisfied that *the Organic portion* of this chemistry, which can be obtained separately, will be generally adopted as a text-book throughout our country. Our brethren in the profession will find it a good book for reference, and will do well to add it to their libraries. L. H. S.

The Transactions of the American Medical Association, Vol. IX. 1856.

This volume was received in November last if we are not mistaken, but to notice it sooner has been simply impossible. It is without doubt in typographical execution and its general appearance, the handsomest volume yet published by the Association, and we say this with the more distinctness that we have had occasion heretofore, to speak in other terms of the doings of our exceedingly amiable and lovely brethren of Philadelphia, under whose auspices this volume is printed.

Of its contents we should be glad to speak more fully than is possible in our limits, but within them must do the best we can. In passing over the minutes, we do so because our readers had a full report of the meeting in our June number, at which time we also gave a sketch of Dr. Wood's excellent address. After these we come to the second part of the *Report on Deformities after Fractures*, by Prof. F. H. Hamilton, of Buffalo. The first part was contained in the preceding volume, and both are of great value. It is not improper for us to say that time has not been at our command sufficient to make a thorough study of this paper, and it deserves more elaborate notice than can now be given to it. Dr. Hamilton's writings are always marked by great originality, good sense, and plainness, and we have seen enough to know that this one is no exception. His position in the profession is already an enviable one, and his course is still upward. Our readers will be glad to know that he is about to publish a book on this subject, but meantime we urge all who treat fractures, to read this paper. It is worth the price of the whole volume.

In the "*Report on Hydrophobia*" which follows, the committee have given an exceedingly interesting paper, tracing the history of this frightful malady, and correcting some popular errors relative to its frequency in certain climates and seasons. To this is appended a tabular record of one hundred and six cases which have occurred in the United States, followed by a detailed account of each case as the committee found it recorded, or as the statement was received direct from those in attendance upon the case.

From the Report we learn that after a due deliberation upon and investigation of the causes assigned for the generation and development of rabies, the committee are forced to acknowledge "that the true cause of this disease is not known, or very imperfectly under

stood." From the record of cases they lay down the principle that it never proceeds from any other cause than the bite of an animal, and as some instances are cited where rabies followed the bite of dogs and other animals free from disease, they therefore conclude that the germ of the disease is in these animals, and that to them we should direct our inquiries. The peculiarity which exists in these animals rendering them liable to rabies, they believe consists in a constitutional irrascibility, and this they "propose as the basis of a different and as it seems to them the true etiology of canine madness."

It is a popular belief that hydrophobia occurs only in warm weather, and more frequently during a certain period of the Summer season than at any other time. The researches of the committee have, however, conclusively proved that it is not more frequent in Summer than in Winter, and that it occurs quite as often one month as another; that it is prevalent in cold climates, and rare in tropical climates.

Dr. Kane relates in the first volume of his recent work a case of hydrophobia which occurred among his dogs in the high latitudes he attained in his vessel. He says that this disease in unknown above seventy degrees, and that therefore he did not suspect rabies in that dog. He was obliged to shoot the animal. In his second volume he also mentions the loss of many of his dogs from what he there designates as tetanus, though presenting the symptoms of hydrophobia. In Constantinople, on the contrary, as every traveller relates, hydrophobia is unknown, although dogs are as numerous as men. Some writers attribute the immunity of dogs in warm climates from this disease to the food they live upon, it being mostly or entirely vegetable. A recent writer, however, has attributed it in Constantinople to the unconfined, unrestrained habits of the animal, their passions being uncontrolled, and their copulative inclinations being freely indulged in.

A belief in sidereal influence is positively rejected in this report. It is stated that very few cases of hydrophobia result from bites upon parts of the body protected by clothing, and that the average period of incubation between the time of receiving the injury and the development of the characteristic symptoms is forty days. As regards treatment, no suggestion is made in the report, and no hope of success is offered by the analysis of the accompanying cases except from excision or amputation of the wounded part. This should be done early, or even at a late hour rather than not at all.

We would especially call the attention of readers to the admirable

"*Report on Plans of Organization for State and County Societies.*" It is an able plea for the association of medical men into societies throughout our country, and sets forth with much earnestness the great advantages of this plan for the accumulation of valuable statistical matter. We should like to extract largely from the remarks of the author, but we can do so only to the neglect of other papers of which we wish to speak. One principal recommendation we must transcribe; it is, "that it be made the imperative duty of all members of local and county societies to keep at least a brief record of all cases in their practice depending upon local or general causes and report as often as annually the number or percentage of each disease occurring during each month, giving the age, sex, and hygienic conditions of the patients, the types of the disease, and the general plan of treatment, together with the results, to a committee of the society, who shall report to the County or State society, and each State society shall, in its turn, report the total of observations to a committee of the Association." The great benefit of such a far-reaching and widely extended arrangement will be immediately seen and needs no comment. The accumulated results of such a plan well carried out would be of incalculable benefit, and the effect it would have upon our present views of the etiology and treatment of diseases which prevail at times epidemically would be of such a character as to fully repay the trouble of keeping the record. It is so difficult, however, to move independent individual minds to act in concert, that we can hardly indulge ourselves with hopes of seeing the admirable suggestions of this committee carried into effect.

Of Dr. Davis's "*Report on the Changes in the Composition and Properties of Milk of the Human Female, produced by Menstruation and Pregnancy,*" we have already spoken in our notice of the Association in our last June number.

The paper is short but highly practical. The conclusions which the author deduces from the few analyses he made relative to the changes in the *composition* are as follows:—

"1st. The occurrence of pregnancy during lactation, produces a very marked diminution of all the solid or nutritive constituents of the milk, such diminution continuing to increase as the pregnancy advances.

"2d In examining the separate proximate constituents, it will be observed that a much greater relative diminution takes place in the casein, the butter or oil, and the salts, than in the sugar and extractive matter.

"3d. There appears to be added to the milk secreted during the progress of utero-gestation some of the granular bodies or colostrum corpuscles, and numerous minute infusoria or animalcular germs which have been very rarely found in healthy milk.

"4th. Changes, the same in kind, take place in the milk secreted after the establishment of regular menstruation, but much less in degree; and the relative diminution of the several constituents is more uniform."

The "*Report on the Causes which impede the Progress of American Medical Literature,*" is by Prof. Gross, who was, if we remember aright, appointed a committee on the subject at the preceding meeting. We have looked for it with interest and read it with much satisfaction. It will be within the recollection of our readers, that at the meeting a good deal of comment was made on the Professor's Know-nothing ideas, and it was repeatedly attempted to bring the weight of prejudices arising from political partisanship to counteract his arguments. The author must have been misunderstood, for there is nothing in this paper which proscribes other nations, but only urges Americans to toil for American reputations. We confess to a little sympathy with the Professor in this respect, for in consequence of our pursuing a similar line of argument we have been favored with a similar political nickname. The remarks made at the association would perhaps have been of little importance in themselves, but they were repeated by several journalists, and now behold the rapidity with which truth has been outstripped. Some journal misrepresenting Dr. Gross was sent to Europe, and this reply to it comes from Paris in the *Weekly Gazette of Medicine and Surgery:* "It appears that the love of science does not, to the same degree, inflame all the physicians of the Union, and that it is choked in some by a kind of sentiment which is found only on the other side of the Atlantic. A certain Dr. Cross (*sic*) of Kentucky, has recently read before the American Medical Association, a paper maintaining that the schools of the United States should, so far as possible, put into the hands of their pupils only American works; that they should cease to translate and to edit the works of foreigners, and that the medical press should occupy itself less with foreign productions and more with those of the country; that they should, in fact, avail themselves almost exclusively of local means of instruction and progress, in order to form an independent medical literature. This is, as an English journal remarks, "pure Know-nothing." Happily, the Association has vigorously repulsed this savage patriotism by declaring that it reveres the great

physicians of all countries, and considers their works as the precious elements of national literature."

Now we have no particular authority for saying so, but we venture the assertion that no one has a greater respect for the great physicians of all countries than Dr. Gross. And yet misrepresentation this side of the Atlantic has led to entire misapprehension on the other.

The subject of the report is the causes which impede the progress of our medical literature, and among those causes is mentioned the fact that the piratical publication of English works in this country prevents that encouragement to our authors which they would have if there were a distinct language spoken by us. To relieve this difficulty slightly it is recommended to teachers to place American text books in the hands of their pupils in those departments in which good ones exist. There is not in this any disrespect of eminent men of other countries. If there is a New York Dissector which is as good as the "Dublin Dissector," is it any way improper to prefer it in this country? or if Wood's Practice of Medicine is as good as Watson's, should it not be preferred to it?

The impediments to the progress of our literature are thus enumerated by Dr. Gross. 1. The identity of the language in this country with that of Great Britain. 2. A disposition in the profession to patronize English works in preference to American (not a word of translations, M. Dechambre). 3. A want of independence in our periodical press. 4. A lack of industry in observing and recording facts in private and hospital practice. Now, is there any treason to the great republic of letters here? The writer says of these reprints, "they are made simply because they serve to fill the pockets of those who incur the responsibility of becoming their sponsors. If they were obliged to purchase the copyright at a fair value, the number of American issues of British works would be far less than it is now." And who can deny the truth of this, which is as notorious as anything can be. Is it Know-Nothingism to point out this fact? The argument is elaborated and illustrated with force. Upon the second point, it is noted that English text-books are recommended to students by Professors in our Colleges, either from want of confidence in American authors, or "what is still worse, and more to their shame, that they are influenced in their conduct in this matter by feelings of jealousy and avarice." The comparison of our writers shows that we have books in all departments which might be advantageously used but which are not. As if to guard against misrepresen-

tation, Dr. Gross says: "Let us not be misunderstood. We would lay no embargo upon foreign works, or in any manner, form, or degree, disparage their merits or discountenance their just claims upon the favor and patronage of the American profession. Literature, the arts and sciences, are cosmopolitan, acknowledging no 'pent up Utica' as their home." Is this Know-Nothing, M. Dechambre? Editing English works, by putting one's name on the title page, and adding a few unimportant notes, is severely commented on as it deserves. It is a riding to notoriety and money by stealing another man's horse, which he has no chance to defend, and we are glad to know that, in the first place, it is getting to be considered as disreputable, and in the next, English writers are taking care to secure the issue of their books here at the same time with their appearance in London, receiving a percentage of profits here, as well as at home. Translation involves an amount of labor which entitles the translator to add his name, and to receive credit for his work, if well done; and to this, Dr. Gross nowhere objects. Trashy books are not apt to be translated, but are very apt to be reprinted.

The third item refers chiefly to the style of reviews in our periodicals. Before we saw this, we had written what we say on another page of our reviews, and so have not much to add. It is, however, refreshing to see the namby-pamby writers thus castigated, and the secrets of drawing books from publishers exposed. Hear what Dr. Gross says of such reviews: "They are characterized more by politeness, than by a manly and independent tone, which is not afraid to utter its real sentiments, and to affix the seal of its unbiased judgment. They are marked by none of the masculine vigor which is so well calculated to impart zest to the reader, and cause him to regret that he is so near the end of his task; which infuses life and spirit into a journal, and makes it a welcome guest at the table of the physician; which fashions and directs the dart, but blunts its point before it is permitted to strike its victim; which metes out equal justice to all men who come within its vitalizing, soul-stirring influence; which blends mercy with severity; which, when occasion requires, wounds, but does not kill. It is a criticism which is neither alkaline nor acid, nor yet wholly neutral, but so nearly neutral as to render it impossible to determine its real character. It is a jesting, good-natured criticism, which, for fear of doing mischief, or of being thought unkind, is bound in swaddling clothes, lest by its sudden and inadvertant jerks, it should kick over the milk and water in the inkstand

of the happy, self-complacent reviewer. In fine, it is an inert, a tame, a spiritless criticism; a criticism without body, without strength, without soul, deaf and dumb, and blind, and halt."

That rings with a true sound, and no wonder reviewers, who were conscious of the milk and water in their inkstands, shouted in frenzy, Know-Nothing!

What is said of the relations of publishers and editors is too true. A prompt, puffing notice to everything secures constant and early copies from the publisher, to whose car the editor is tied before he knows it. Honesty, care, and necessary severity are apt to be followed by a cutting off of the supplies of which Dr. Gross gives illustrations from life—which any one who wishes can find to be true. But we must hasten on unwillingly, and on the fourth topic cannot dwell. It is notorious, it is undeniable—and let us all try to do better hereafter. Many, many thanks, Dr. Gross, for your courageous and sensible report. It will do good, though it did cause many to wince.

The *Report of the Committee on Medical Literature*, of necessity, runs in somewhat the same channels with the preceding. The first part consists of a tolerably complete list of the works published in this country during the preceding twelvemonth. Occasionally a few lines of commendation, or notice of a more unfavorable character are added, the result being very much like what one would have by taking one part of a publisher's catalogue and an equal quantity of book notices in a journal, and mixing them skilfully. After this enumerative list the committee say, "In a critical survey of our national medical literature, not only for the current year, but for years gone by, we have been strongly impressed by two antagonistic particulars respecting it: 1st. Its general excellence; and, 2d. The depreciation which it has so often met with at the hands of some of our own brethren," and then off they start (to use one of their own quotations, though in a more respectful way,) like

> "A Pegasus,
> A sun-reared charger snorting at the stars,
> And kicking all the Pleiads at his heels."

Men of straw are set up and knocked over mercilessly; fine sentences are written, which are sounding but empty—and the whole argument, so far as there is any, directly supports the position taken by Professor Gross, while it is sometimes made to appear almost personal against him. But we must not make charges without giving our reasons for them, and we therefore say that the idea is erroneous that is expressed in this sentence, which we quote, namely,

"that for years past, some of our journals have teemed with articles, editorial and communicated, whose set purpose seems to be to depreciate to the last degree the extent of American medical scholarship, and the value and trustworthiness of American medical authority." We have been familiar with the whole of the medical journals of our country for six years and more, and we challenge proof of this assertion. Not one can be found that has "teemed" with such articles, there ever having been rather insufficient appreciation of the merits of our authors, than "depreciation to the last degree." This is our illustration of the men of straw.

So many fine sentences are to be found that we take this almost at random, and could give at least a dozen equals. "We have felled forests rather than trimmed the midnight lamp—have reared great cities rather than studied great books—have built navies rather than written metaphysical philosophy," and so on.

The approach to personality is suggested by p. 385, and its sequents, and may, perhaps, not be very objectionable, but certainly is in our judgment in bad taste, under the circumstances at that time existing, of the majority of the reporters being officers of a rival medical school in Louisville.

The committee say, "We suggest that, if it be universally, or even generally, true of American physicians, that they prefer foreign to native writers, it proves either that our medical readers have no judgment, or else that the foreign authors are really the best." The committee believe this is not true, but if it is, another reason is the true one, namely, that the writings of English authors are put before the profession at prices at which it is impossible to furnish the American production, and allow the author any compensation. Between two equally good books cheapness carries the day, and because the piratical publisher does not pay the English author for the results of his labor, he undersells the American author who claims some remuneration, and whose claim is protected by law. The committee's illustration is this; "he could hardly be called a wise man who would take for his daily diet peanuts instead of potatoes, because one grew on his own farm, and the other did not." Very true. But supposing a man offers potatoes to you at a price less than you can dig those on your own farm, because he stole his, is it wise, then, to buy them? This is nearer the true statement of the case by such homely similes. The committee think that American works are used in good proportion, perhaps more than English, which is a question of fact wherein we think they are in error.

The last six pages of the report are taken up with a good statement of the argument against an international copyright law, which is the best part of the whole report, but needs no recapitulation here. The concluding paragraphs are quite sounding and rhetorical, but we only quote a sentence confirmatory of some of Dr. Gross's statements. The committee say it would be a good thing if the Association could—which they think it could not—"enforce a judicious excise on foreign importations, and wither that pestilent class of editors who 'bring out' foreign works and divide glory with their authors, without sharing labor, or adding one jot or tittle to our knowledge of science and art," and so say we.

The *Report of the Committee on Education*, is by the Chairman, Dr. Wm. Henry Anderson, of Mobile. It is marked by good sense, by an appreciation of the Utopian character of many plans for elevating the standard of education in our country, and strives for that which is practical as well as beautiful. The author has clearly given much thought to the subject, and his propositions are the result of his own deliberations, aided by the suggestions of various friends and correspondents. Dr. Anderson's plan is, therefore, worthy of careful consideration. It is, briefly, that more thorough and systematic instruction should be given to the pupil in the office before he goes to attend the lectures of the college. In this way it is clear that much time can be saved to the Professors, who, instead of being compelled to occupy their courses so largely with the rudiments of their several branches could proceed at once to the higher and more important portions of them. As a means to this end it is proposed by the author to have some body write a book which shall cover all the preliminary ground, and that the students shall become familiar with this before attending their first course of lectures. The idea is a good one, and is correctly based on the necessity for more preliminary education. It is practical, *if* only the colleges will lend it their aid, which we venture to say they will not do. We are sorry to be compelled to say that the larger schools will not insist upon any such course, and till they do, it is in vain that the smaller ones attempt it. Inanition is the inevitable result of their efforts. The first movement must be made by the private teacher, by each one who receives a student into his office for instruction, and till this is done we have little hope of great improvement, though we will wish success and lend our mite of assistance to all such sensible, practical schemes as that which is urged in this paper.

The *Report on Treatment of Cholera Infantum*, by A. J. Fuller,

has one good thing about it, namely, its brevity; but with even this, we regret that it should go to the world from our National Association. We do not feel disposed to point out its many errors and faults, and do not find in it anything commendable. Its author's mind seems to have been in a muddle upon the subject.

Dr. Newman, in his Report, has presented a very readable and instructive article upon the *Sanitary Police of Cities.* The agreeable manner in which the subject of statistics is presented, involving columns of figures, scarcely permitting any figurative explanation, has greatly enhanced the interest of this paper, if it has not added to its practical value. The previous labors of Dr. Newman have fitted him for this work ; and this Report adds to his reputation as an able writer on Statistical Medicine and Public Hygiene.

Dr. Newman, in this Report, has avoided, as much as possible, the paths followed by previous reporters to the Association upon the subject of Public Health, and in this paper has endeavored " to tabulate the effects of disease and to exhibit by figures the ravages that *preventable* disease is committing in our midst, and especially in our cities." The statistics presented by Dr. Newman are very curious, and refer particularly to those diseases which are called *zymotics* by nosologists, which affect cities and crowded places, and are capable of being prevented or controlled by human agencies.

Two per cent., or one death in fifty, is taken as the healthy and natural standard of mortality ; and in comparison with this, Dr. Newman has given the rate of mortality in several of our principal cities. These figures show the increase in mortality from causes operating in closely settled cities, and if we calculate the proportion of deaths from *zymotic* diseases, the result becomes a matter of surprise that so large a mortality proceeds from disease to a great degree preventable in their epidemic form. The total number of deaths in the United States for the year ending June 1st, 1850, was 323,023, of which 131,813, or nearly 41 per cent., were from *zymotics.* If from this number be deducted 31,506 deaths from cholera, which prevailed that year, and which would not enter into the account in ordinary years, it leaves over a third of the mortality produced by zymotic diseases. This is an alarming fact, staring in the face those to whom is delegated the care of the public health.

During the period of an epidemic, the great increase in the number of deaths calls attention to sanitary measures, and a spasmodic effort is usually made in that direction ; but we take little notice of those diseases which daily carry hundreds to the grave, and silently

act as an unseen scourge in our midst. The statistics presented by Dr. Newman show us that even during the year 1850, when the cholera raged, there were more deaths from the various forms of fever than from cholera,—the total number of deaths from fever being 33,344. "It is not too much to say," says Dr. Newman, "with these figures before us, that we had two epidemics abroad through the country doing the work of death side by side."

After mentioning cursorily the etiology of several of the principal zymotic diseases, Dr. Newman then considers "the municipal regulations which have for their object the correction of the evils which originate and propagate disease, or are in any way inimical to the public health." Under this head he treats of the influences exerted by water, sewerage, paving, over-crowded and ill-ventilated houses, the removal of the soil, and vaccination.

The Report closes fittingly with a recommendation that medical men should be appointed upon our local boards of health, and that matters appertaining to the execution of sanitary police regulations should be confided to the hands of our profession.

Dr. Horace Green's "*Report on the Use and Effect of Applications of Nitrate of Silver to the Throat, either in Local or General Disease,*" has so recently appeared in our pages, that we need offer no analysis of it.

Dr. Wroth's "*Report on the Topography of the Eastern Shore of Maryland,*" from its character does not admit of a critical analysis. The value of such papers consists in their being the ground-work for a future report on Epidemics, which is promised at another time for this section of our country.

The *History of the Epidemic of Yellow Fever in Charleston, S. C., in* 1854, *by Dr. D. J. Cain*, we are forced to pass by with only a slight notice, notwithstanding our wishes to the contrary. Some of the inferences drawn by the author are worthy the investigation of those who have to combat this pestilence of warm climates. "The view," says the author, "which refers the seat of the fever to the great sympathetic nerve, or the nerve of organic life, seems to me erroneous. That the sympathetic system is involved, and even prominently, in the morbid action, appears to be indisputable; but that the first impression of the specific poison is upon the blood, constituting the first link in the chain of phenomena of the disease, is inferable from a variety of circumstances."

As regards the etiology of Yellow Fever, Dr. Cain does not believe that the telluric or meteorological states which are dwelt upon

by many writers can generate this disease either separately or in combination, but he thinks they can place the blood by their influence in a condition favorable to be acted upon by a specific poison when introduced.

From a review of all the conditions present in Charleston in 1854, Dr. Cain considers the terrestrial and meteorological causes as inadequate to account for the *origin* of the fever. There is, he states, but one other possible mode, and that is importation from abroad. In this connection he states, that as far as Charleston is concerned, "it is *not until some time after* the arrival of a vessel, or vessels, from a port or ports where yellow fever is prevailing, generally with a case or cases of the fever on board, that it breaks out in the city."

Dr. Cain, upon the data furnished by the epidemic, the history of which he gives, ranks himself in advocacy of its contagious character, and in support of this view adduces several cases, and still further endeavors to fortify his position by the ingenious calculation of chances made use of by Dr. Stokes in his lectures on fever. Notwithstanding this, we opine the subject of contagion and non-contagion will still remain open, for disputable ground of medical philosophers.

The "*Report on the Epidemics of Louisiana, Arkansas, and Texas, by Dr. E. D. Fenner,*" is mostly given up to the consideration of Yellow Fever. By the aid of his numerous correspondents, Dr. Fenner has succeeded in making a very faithful report of the history of this fever, in those three States, during the years 1854 and 1855.

We learn from this report little that is new in relation either to the etiology, pathology, or treatment of this disease. Dr. Fenner, however, frankly acknowledges that he, with a majority of his *confréres*, believe that the only thing to be done is to assist nature in her conflict with the febrific cause, tacitly agreeing to the opinion expressed by Pitcairn, and quoted by another author in this volume, that yellow fever cannot be cured, but may be conducted to a favorable termination.

Report on the Meteorology, Mortality, and Sanitary Condition of New Orleans, for the years 1854 *and* 1855, *by E. H. Barton, M.D.* Dr. Barton's contributions to statistical medicine are so well known that we need not speak of their great merit. Papers like this one, which appear in the Transactions, depend for their value, not so much upon their individual excellence as upon an accumulated record of similar material obtained through a long series of years. In this report the views of the author upon the subjects of a high degree of

heat, solar radiation, dew-point, humidity, disturbances of the soil, &c., are further exemplified and sustained. We have frequently referred to them in our pages, and once quite at length, in reviewing Dr. Barton's Report to the Board of Health of New Orleans, to which review we refer our readers who are curious on this subject, and who have not Dr. Barton's papers at hand.

Dr. G. S. Palmer's *Partial Report upon a Uniform System of Registration of Births, Marriages, and Deaths, and the Cause of Death,"* is merely a recommendation that the aid of laws be solicited to accomplish this object, and an outline is submitted as the basis of a law to be proposed to each State.

Professor Steiner's *Report on Strychnia: Its Physiological Properties and Chemical Detection*, is interesting, practical, and calculated to be eminently useful. It includes a report of Dr. Gardiner's case, and the whole is such that we shall at the earliest day possible, lay it before our readers. They are already familiar with his style of writing, and will anticipate a rich treat. Till then we pass it.

The prize essay is on the *Arterial Circulation, its Physiology and Chief Pathological Relations*, and by Dr. Henry Hartshorne. A subject of so much interest, and treated so elaborately, cannot be passed lightly, if at all touched upon. We must omit what we desire to say of it till another opportunity.

PROCEEDINGS OF SOCIETIES.

NEW YORK PATHOLOGICAL SOCIETY.

Reported for the MONTHLY by E. LEE JONES, M.D., Secretary.

October 22, 1856.—*Dr. T. C. Finnell* presented the *stomach* and *mesenteric glands*, removed from a sailor, who, after partaking of a hearty supper last evening, retired to bed, feeling as well as usual. This morning he was found dead in bed. By his side was a quantity of acetate of lead.

On inspection there is seen great vascularity of, and abundant tenacious mucus in, the stomach. The mesenteric glands are enlarged. Some of them have undergone softening, others are composed of calcareous substance and cheesy matter.

The second specimen, presented by *Dr. Finnell*, also consisted of the *stomach*, together with the *uterus* of a young woman who commit-

ted suicide by taking one ounce of laudanum at ten o'clock in the morning. Afterwards she drank so freely of brandy as, by her actions, not to excite the suspicions of her companions. At three o'clock in the afternoon she went to her room. Not making her appearance at supper, her room was entered, and she was found dead.

The stomach presents great redness and injection of the mucous membrane, and especially of the cul-de-sac. The ovaries are enlarged. The fallopian tubes not free, but attached to the uterus.

The third specimen, exhibited by *Dr. Finnell*, consisted of *an ossified hydrocele sack*, with *a portion of strangulated intestine.*

Egbert Alexander, aged 70 years, residing at No. 211 Hudson street, was knocked down by a runaway horse, receiving injuries of the pelvis and abdomen. He was carried home, complaining of severe distress in the left side. On examination, there was observed a large inguinal hernia, which presented signs of strangulation. The hernial protuberance was complicated with a large old hydrocele, which extended down the thigh to within four inches of the knee-joint. Its weight was about ten pounds. The entire scrotum, with its contents, would fill an ordinary water-bucket. There was no discoloration of the integuments to indicate an extravasation of blood into the tissues within the tumor. As the symptoms of strangulation were increasing, and all attempts at reduction by the taxis failed, an operation was advised; but the patient would not consent. He gradually failed, and died on the third day after the injury.

Autopsy twelve hours after death; body very pale and extremely emaciated. On passing the finger into the left inguinal canal, it could readily move the intestine about from side to side, showing that there was no strangulation; still the gut could not be pulled into the abdomen, owing to impacted fœces which completely filled all the intestine in the hernial sac. On laying open the scrotal tumor, it was found to consist of three different parts. First, the hernial protrusion, consisting of the descending colon. Second, the left tunica vaginalis about as large as a child's head of six months' old, which was filled with laminated coagula in many places, forming rounded tumors projecting from the interior of the sac. The testicle was so completely atrophied, that no trace of it could be discovered. The tunica was calcified completely at its posterior part, and in patches throughout the rest of its extent. The third part, which composed the largest portion of the scrotal tumor, was made up of extravasated blood, which infiltrated all the tissues of the tumor. The right testicle was in a normal condition.

The patient's death was no doubt caused by this internal hæmorrhage, which commenced at the time of the accident, and continued up to the time of his death. A few flakes of fibrine were discovered in the abdominal cavity, indicating recent peritonitis.

Dr. James R. Wood laid on the table an instance of *cancer* of the *pyloric orifice.* It may be remembered by some of the older members of the Society, that he had a few years since presented a case of cancer of the cardiac extremity, with complete occlusion of the orifice. The case was somewhat interesting from the manner, and length of time the patient was sustained, namely, by injections of soup, she being nourished entirely in this way for two months.

The specimen now exhibited was obtained from a lady 60 years of age, to whom he was called a week since. She had been for some time under the care of the homœopathists, by whom she was treated for dyspepsia, and a cure certainly promised. Palliative measures only were deemed proper. At the expiration of a week she died.

The *autopsy* discloses complete occlusion of the pyloric orifice—the cancerous deposit, at the inferior portion of the stomach, pushes up the mucous membranes so as to entirely close the opening.

Dr. Clark stated, that he had in May presented a similar case. The pyloric orifice was completely occluded by cancerous deposit. The patient had been subject to dyspepsia for 20 or 25 years.

Dr. F. M. Wright presented a specimen of *perforation of acetabulum by morbus coxarius.*—The specimen was taken from the body of a man of about 30 years of age, who had been a patient in the New York Hospital for nearly a month before his death. The trouble in the joint began a year previous to his admission, by his own account, and during the last seven months of this time he had been confined to bed, suffering intensely. On admission, the general aspect of the limb was that of luxation on the dorsum ilii, the thigh being adducted, the knee partially flexed, and the toes inverted. The trochanter major was very prominent, and the soft parts around the joint much swollen. The abscess had opened spontaneously near the trochanter the track passing downward and backward toward the tuber ischii. His general condition was exceedingly bad. He had all the constitutional symptoms naturally consequent upon the extensive progress of the disease—great emaciation, hectic fever, feeble and frequent pulse, loss of appetite, etc., and with these he continued to sink, in spite of vigorous supporting treatment, and eventually died. On *post mortem* examination, the abscess about the joint was found to be very extensive—the head of the femur was found in the acetabulum,

denuded of articular cartilage and synovial membrane, rough and spongy—the ligamentum teres entirely gone, the surface of the acetabulum also denuded, rough and spongy—enlarged by absorption at its posterior part, where the head of the femur was resting, and perforated by a hole about three-quarters of an inch in diameter, through which there was a communication with an abscess of considerable size, in the substance of the iliac muscles.

Dr. Wood remarked, that he had presented two specimens, showing a like occurrence. In one, the dislocation was into the ischiatic notch, and was reduced with great ease. In the other, the head of the femur was in the dorsum of the os innominata. These preparations are in his private collection, and a third one is in the museum of the College of Physicians and Surgeons.

The next specimen exhibited was an instance of *softening* of the *brain*, presented by *Dr. Alonzo Clark*, who observed, it may perhaps be known to most members of the Society, that we have recently been called on to lament the loss of a highly intelligent and much esteemed professional brother, Dr. David Green.

It was not, however, his intention to recall his many good qualities and virtues. That would be done by one more competent than himself. He was sixty years of age; an active professional man. For some months past he had, in addition to his professional duties, which were large, been much occupied in attending to his real-estate, superintending the erection of several buildings. He would breakfast and leave home by seven o'clock, and frequently not return until ten at night, eating nothing in the meantime.

From these exertions he gradually fell into an anæmic condition, attended by weakness, exhaustion, and at times giddiness. He was advised to change his mode of life; and for this purpose he repaired to the country, where, however, he remained but a short time and then returned to the city, somewhat improved in his general health. The giddiness continued to increase, unattended by pain, until Monday week. It may here be mentioned, that there existed on one of his fingers, an ulceration, which was regarded as syphilitic in its nature by several of our prominent surgeons. It was contracted about two and a half months previously, while attending a woman of suspected character in confinement.

When first seen by Dr. Clark, with Dr. Sayre, on Monday, the 13th of October, he was found in a condition of general feebleness, but still able to walk about, no paralysis, giddiness accompanied by vomiting—pulse, of fair force. The nervous energies seemed as if

exhausted, and it was thought necessary to elevate the tone of his system by tonics and appropriate regimen.

On the 3d day after, Wednesday morning, at 4 o'clock, he was summoned and found that he went to bed as well as he had been for the few days past, but about one o'clock became paralyzed in the whole of the left side, including the muscles of the face, everything but those of the eye. He could speak, but so indistinctly that the effort to make himself understood was painful, even to those about him. He stated, among other things, that for some hours before this attack he had had a prickling sensation in the limbs of that side. He said on the afternoon of Wednesday, that he had the same sensation in the right, and that that would soon be paralyzed also. During the day he managed to communicate his thoughts, and was as sound in mind as ever in his life, yet he wept frequently with all the child's distortion of face. Toward evening of this day he lost the power of articulating entirely; and, indeed of voice. At the evening visit, ten P. M., he had not spoken for some hours, and it was discovered that he would attempt to write. This he intimated, by extending the index finger, closing the others and moving it along the bed-clothes as in the act of writing. This, however, was not understood till he pointed to the other room and repeated the writing notice. (There were no writing materials in his bed-room.) A pencil was then put in his hand and a paper. A sheet of foolscap was held before him. His hand was very tremulous and his movements very uncertain—his marks were some inches in length, and crossing each other variously. From watching the movements of the pencil, more than from what he had supposed he had written, we discovered that he was suffering from constraint in his position. When this was done, we succeeded in understanding a second request, of a similar character. He again attempted to write, but we were not able to understand, and thought as it cost him a considerable effort, he had better try no more for the present. Up to this time his physicians, Drs. Parker, Wilkes, S. C. Foster, Sayre, and myself, did not hesitate to call the disease apoplexy; though I remarked to the others, or some of them, that with all that is said of dizziness as a premonition, this was the first time I had ever seen it as a well-marked precursor of apoplexy. The next day paralysis had extended to the right side, and every muscle of his body seemed to be deprived of voluntary power, except those of the eyes. He breathed, his heart beat, and there were movements and intelligence in his eyes. The breathing was rapid and short, but not stertorous. The pulse but little accelerated. He seemed to

recognize every person who came into the room, and his eyes followed the movements of those who were striving to relieve him. He did not swallow. Whatever was put into his mouth was breathed into the trachea, and caused cough; and the respiratory action seemed to be so feeble, that it was feared the effect of such attempts to nourish him, or administer medicines, would be to suffocate him, and after a few hours all administrations of this sort were made by the rectum. The next day, Tuesday, the eyes had still an expression of intelligence, but there was marked external strabismus of the left eye—in other respects they appeared natural. The paralysis was now so marked, the lower jaw fell away from the upper, and the tongue fell out of the mouth. By the evening of this day all evidence of intelligence had passed away; the respirations more frequent, the pulse 130, and feeble—jerking in the limbs of both sides, particularly in the left. This was noticed on the right side from the time it became paralyzed, and so of the left, paralyzed later; but they were now more frequent. Stertorous breathing was now noticed for the first time, but this only occurred when the head was turned so as to produce some little constraint or twisting of the trachea. It was now proposed to introduce the stomach-tube for the purpose of nourishment and medication, but those who had watched the patient most closely, objected, having seen that he nearly became suffocated from a change in the position of the head, and believing he would die from the attempt, it was abandoned. During Saturday the breathing rose to 50 or 60 in the minute, the pulse to 150 and 160, and the patient seemed to be profoundly comatose. Bed-sores had already formed notwithstanding the precaution of changing his position frequently. A water-bed was not used because it was too painfully evident that death was inevitable and near. His urine had been drawn from the second day—it was scanty and high-colored. The fœces passed involuntarily, but not frequently. He retained the nutritive and other injections. He died in the evening of Saturday.

Remarks.—From the time the paralysis had passed to the right side, observing the frequent jerking in the paralyzed parts, his physicians, or some of them, were persuaded that the disease was not apoplexy.

Apoplexy of the left cerebral hemisphere occurring on Wednesday morning at 1 o'clock, and on the right side in the night of Wednesday, was highly improbable. Apoplexy of the nodus cerebri affecting the right side, would not be likely to pass over to the left, and softening from sanguineous effusion in so short a time could not

be anticipated. Softening, of which Dr. Green had himself expressed a fear, in my first interview with him, seemed the most probable view of the case.

Post Mortem Examination.—Scalp unusually bloodless; vessels of the dura mater full, but not engorged; a few drops of serous fluid escaped on lifting the dura mater; arachnoid membrane slightly opaline, and dotted over, on all the convex portion of the brain, with countless yellowish white spots, and entirely opaque; arachnoid raised by transparent serous effusion; sulci widened by the same effusion—the whole amount of effusion not exceeding two ounces; vessels of the pia mater full; many of the veins somewhat enlarged; vessels at the base of the brain full, but less full than those on the convex surface; parietal arachnoid apparently unchanged; brain of unequal firmness, when pressed on its surface—of usual firmness *only* on the convexity of the posterior third. *On section*, the blood points very numerous; cortical substance nearly normal; medullary portion of a dusky hue; centrum ovale sinestra of irregular consistence, the central portion being softer than the anterior, but not decomposed or broken down; both optic thalami soft to moderate pressure; vessels of the ventricles full; choroid plexus of the left side distended by serous cysts; vessels at the base of the corpus striata unusually large, making on their section a cribriform appearance; vessels on the walls of the lateral ventricles unusually full, on the choroid plexus empty, or nearly so; from the inferior cortical layer of the posterior lobe, upward to the base of the corpus striata, and all the way backward, the consistence of cerebral substance markedly diminished, but not broken down; the softening extending under the floor of the posterior cornua of the left side; atheromatous matter on the posterior branch of the basilar artery; softening of the nodus cerebri, involving nearly the whole of right crus-cerebri, and about two-thirds of the opposite crus, with disorganization complete; the crura cerebelli free entering the nodus below the point of the principal softening; the anterior cerebral artery had undergone the same atheromatous change as the posterior, only not to so great an extent. *Thorax.*—Heart large and flabby; cavities filled with fluid blood; about ʒj. of serum in the pericardium; valves healthy; both lungs firmly adherent to pleura every where, and darkly colored with blood; scattered over the surface of the right lung were two or three round black masses of the size of peas, to the touch like cartilage, and look like coagula; left lung, as the right, excepting the masses above described, of which there are none; liver healthy;

kidneys ditto. *Microscopic Examination.*—The softened nodus cerebri has been kept in alcohol and water, and was examined this morning (Oct. 22, 1856), under the microscope; the nerve fibres are most resolved and have disappeared, but there is in lieu of them an abundance of oil globules disseminated through the tissue, and the granular matter is abundant; the fibres or fragments of them can be seen here and there, but few in number and in short pieces; a few only of these fibres are varicose; the nerve vesicles appear to have undergone no change; they retain their transparency and their nuclei, and some of them seem to have become granular. The extremely soft state of the nervous matter made the examination interesting in a physiological point of view: placing some of this soft matter on a slide and covering with thin glass, the weight of the latter caused the slow and steady extension or spreading of the nervous substance. As the nerve vesicles were thus removed from their beds, it was plain that each one had a single rather firm fibre or thread attached to its walls, and apparently a continuation of them, which ran into and was lost in the still undisturbed portion of nerve matter. Many of the vesicles were held attached for a long time by these threads, while others floated past them, and the attached one would assume a pear or vorticella shape. There was nothing which is usually called exudation corpuscles, and no inflammatory exudation of any sort. These threads were elastic and would yield considerably, as the current passed by, and then contract, drawing back the vesicle to its first position. It is not certain that all the vesicles were so attached, but many, both large and small, undoubtedly were; and in all the instances noted, this attachment was by a single thread. After separation no processes could be seen on the vesicles, though in some what looked like the contracted vesicular end of the thread. Sound brain matter cannot be seen in this way; this thread can hardly be anything else than the axis cylinder of the nerve fibre.

NEW YORK MEDICO-CHIRURGICAL SOCIETY.

Reported for the AMERICAN MEDICAL MONTHLY by J. O. BRONSON, M.D., Secretary.

August 26th, 1856.—*Dr. Leigh* exhibited a cerebrum having an abscess and apoplectic clot in its right side. The following history accompanied it:

Maria Coston, three years of age, of scrofulous habit, had been suffering a chronic otorrhœa of the right side, with purulent dis-

charge, for eight months, following an attack of rubeola. The discharge for the last two months had been decreasing, and she was improving in her general health. This improvement seemed to be due to injections of nitrate of silver, of the strength of ten grains of the salt to an ounce of water, every morning. She continued thus until the 22d inst., when my attention was called to the inflamed state of the affected ear, and the peculiar expression of her countenance. I ordered the application of an anodyne poultice. She did not complain of any pain. This condition remained until the 24th, when she vomited once or twice some green matter. She seemed very weak, and her respiration was labored ; pupils dilated and presented evident signs of cerebral trouble,—crying, rolling her head in the pillow, and generally resting on the afflicted side. Her condition was such that she could not bear active treatment, and I ordered three leeches to be applied behind the ear. She was then in a semi-comatose condition, and gradually sunk into deep coma, and died about one o'clock at night.

Post mortem, thirty-four hours.—Cadaveric rigidity still firm in the extremities. The head only examined. The brain throughout slightly congested. About half an ounce of serum was found in the right lateral ventricle. At the base of the brain on the right side was an apoplectic clot, and a little posterior to it an abscess about the size of a walnut, as may be seen in the specimen.

Dr. Cox called attention to the specimen as compared with the cranial bones presented sometime since, exhibiting the effects of the same disease. He considered the specimen of interest from the unfrequent opportunity the physician has of seeing the result in such cases. Being questioned as to the utility of injections, he replied that he was of the opinion that they frequently were of as much harm as benefit. He had seen, indeed, very dire results from the use of caustic injections.

Dr. Brundige having made an examination of the specimen (stomach) presented by *Dr. Bouton*, reported that on opening the tumor attached to the large curvature, he found it to contain—first, about half a drachm of thin cream-like matter, which readily oozed out on making an incision into the sac—second, a substance resembling fine white meal moistened with cream of sufficient tenacity to retain its form when handled—third, a substance resembling coarse brown sugar, adhering closely to the muscular coat of the stomach. This composed about one-eighth of the contents of the sac, the entire being about the size of a hickory nut. On placing a part of the

second portion under the microscope, he found it composed of a fibrinous basis, containing cells corresponding to cancerous, granular matter, corpuscles, and compound granular corpuscles, &c. This portion was somewhat broken down and indistinct. The third portion was perfectly distinct, showing the entire cells of the cancer, with their nuclei and nucleoli, with the matrix usual to such matter.

September 9th, 1856. *Dr. Benjamin Lee* presented two hypertrophied hearts, one of which was accompanied by a history; the other, though without history, was interesting, inasmuch as it exhibited the organ greatly hypertrophied, resulting from a fibrinous and ossific deposit upon the aortic valves. The aorta also, at a point just below the subclavian artery, was contracted to less than one-third the natural diameter. The sounds during life gave evidence of aneurism.

Bernard Trainor, 45 years of age, laborer by trade, was attacked seven years since with articular rheumatism, from which he recovered, with slight dyspnœa, and tendency to œdema of lower extremities as its result. Eighteen months since was admitted into Bellevue Hospital, with abdominal dropsy, and signs of extensive cardiac disease. For four years past has been unable to lie down, with the slightest degree of comfort. Has been tapped three times since he has been in the institution. The last time, the day before his death, which took place September 6th. The physical signs, a few days before death, were extensive dulness on percussion; over heart, increased action. Double sounds at the apex and base, and a loud aneurismal souffle, heard most distinctly in the fifth intercostal space to the right of the sternum. On examination the heart was found greatly enlarged, weighing $2\frac{1}{4}$ lbs. The aortic valves contracted and thickened, with a little bony deposit on their outer side. Immediately without the valves, was a large aneurism lined with calcareous deposit, gradually shading off, as it became more remote, into atheroma. Liver, cirrhosed. Thick adhesions between omentum and intestines, in the right hypochondrium, making a tumor which had been noticed during life.

In connection with these specimens, *Dr. Conant* exhibited a heart, hypertrophied, and presenting an aneurism of the aorta which had ruptured into the pericardium, producing instant death.

Dr. Bennett, of Bridgeport, also presented a heart removed from a stout, healthy negro, eighteen years of age, who, in altercation, received a stab, as was supposed, with a dirk-knife. He fell senseless and pulseless to the pavement, in which condition he remained for twelve hours, when the cardiac sounds began to be audible. The

wound was made a little to the left of the ensiform cartilage, and passed upwards in its course. There was but slight hæmorrhage. He was kept in a recumbent position for three or four days, when the cardiac action was restored, and he went out contrary to direction, walked a considerable distance, and went up two flights of stairs, without ill results, however. He had been ordered to keep his bowels free. He failed to do this, and going to the privy on the thirteenth day after the accident, and making considerable effort, as was supposed, in defecating, fell and in four hours after died.

Post mortem.—The track of the instrument causing the wound was found to have been from a point about half an inch to the left of the ensiform cartilage upwards, along the pleura, and through the pericardium and walls of the heart into the left ventricle about one inch from the apex. The wound upon the external wall of the organ being about twice the extent of the internal opening. The pericardium was found filled to its capacity with the effused blood: not only the fresh blood, but the debris of the first effusion. There had been slight pericarditis, as may be seen upon the specimen, there being around the external wound, over a surface of about an inch, coagulable lymph, which was the result of nature to repair the injury, for it can be seen that it once covered the incision, but the effort immediately preceding his death ruptured it. The wound was sufficiently large to have produced instant death, easily allowing the handle of a scalpel to traverse it, and such would undoubtedly have been the result, but for the fact that the internal opening is just behind one of the columnæ carnæ, which is the only means that can be discovered to have prevented the immediate effusion of the constantly renewed contents of the organ. From the appearance of the specimen and the history of the case, we may reasonably conclude that had he followed the directions of the medical attendant, the wound would have healed, and the man lived to have died by some other means.

Dr. Cox thought this case very instructive. It showed how requisite rest and freedom from all excitement and exertion are in such cases. A similar case occurred at the New York Hospital, in which the patient fell in the privy as in the instance presented. The case of Poole also, is another where the requisition was not complied with and death followed. He remembered, also, the case of a servant girl, who, by some accident fell, striking upon her chest. Severe pain followed for some days. On the fifth or sixth day she fell dead.

Upon examination the left ventricle was found to have ulcerated and burst.

Dr. Thrasher presented the larynx and a part of the trachea of a man twenty-six years of age, for some time the subject of aphonia. For a week previous to death, it was with difficulty he could whisper. He had œdema of the glottis. Application of the nitrate of silver was made to the throat two days before death. The disease affecting his speech was not attended with as much care as it would have been had he not been affected with chronic dysentery, for which he was treated, but ineffectually, as he died on Sunday evening.

Post mortem.—Examination of the air passages discovered œdema of the glottis, curvature and slight thickening of the epiglottis; ulceration had destroyed the chordæ vocales and all the tissues covering the cricoid cartilage in front, the cartilage itself being in a carious condition. The ulcerative process extended down the trachea a distance of two inches. The pleura exhibited no sign of recent inflammation, yet contained effused fluid and the posterior walls were firmly agglutinated. The lungs contained tubercular matter, but no where in a softened state. The man died slowly; respiration was slightly croupy.

Dr. Cox then presented a large post-partum, partially organized, clot obtained under the following circumstances: A woman had been complaining for about three weeks. Several gentlemen examined her case, and having made use of various means, as the speculum, &c., diagnosticated the case, as enlargement of the uterus and not pregnancy. The woman suffered hæmorrhage for fourteen days, and at the end of that time *Dr. Brundige* was called and found her very much prostrated, and after a due examination declared her pregnant at about three months' time. The woman miscarried. One week after a digital examination felt the rounded edge of what was supposed to be a small portion of the placenta which had failed to follow the mass at the usual time. In four or five hours the clot presented was ejected. *Dr. Cox* thought he had never seen a case where the mass or clot had become so much organized. If his memory served him, a similar clot was exhibited at the Pathological Society of London some years ago.

Dr. Bennet was pleased to have the subject come up, inasmuch as several cases had passed under his notice, and one quite recently, wherein the patient, one week before confinement, became faint for some hours. The child was still-born. After the birth, a clot larger,

in fact twice as large, as the one presented was ejected. In another case, some two or three years ago, all went on well until near the close of labor, when the patient became suddenly pale and almost pulseless. The child was born alive. The uterus was found full of coagulæ. He was of the opinion that such cases arose from a partial detachment of the placenta.

EDITORIAL AND MISCELLANEOUS.

—*Percavi, Peccavi* is the cry of several of our exchanges when they consider the manner and the matter of their reviews. The occasion appears to be that some publisher did not think his author had received attention enough from some journal—only a few lines of notice being given to what had cost the author so much and so long labor. In this cry of self-condemnation we shall not at all join, for we do not feel ourselves at all guilty. Without claiming to be a *review par excellence*, the MONTHLY has constantly presented its readers with elaborate reviews, in which truth has been the object sought in the discussion of its topics, and the profit of our readers has been aimed at, not the benefit of the publishers. Of this latter class, we have made some curious observations, which, highly as we esteem the men, we cannot but think, exhibit a little oddity. A review suits their purpose very well in the main, whether it praise or blame, if only it contains some passage, which, when standing by itself, is sufficiently laudatory to be culled and preserved among other such sweet flowers. Any editor of experience and observation knows that often he detects most flattering passages quoted from even scorching critiques, and published with remarkable coolness, as if all its surroundings had been redolent of praise. The sternest critic's heart often relents after the faithful application of the actual cautery, and he adds, perhaps, that "the book is well printed and illustrated," whereupon this is set forth as his only opinion of the book—all the rest being, of course, repressed. Or again; disproving of the doctrines of a book, he says: "And yet, this treatment of the subject suggests abundant thought to the reader, which will repay him for his labor in toiling through it," whereupon, the publisher cuts off the first two and the last four words, and the weight of the journal's authority is thrown upon the opposite side from that which was intended. We have seen our own words and the

words of others thus metamorphosed in spite of all possible care to avoid it, and still there is no remedy for it.

An author said to us lately, "Your Reviewer of my book writes just as if he knew more about the subject than I do," (and we verily believe he did,) "and there is not a word said about the book." The subject was discussed fully, the book hardly mentioned, and no one sentence could be taken out and reset in brass. *Hinc illæ lachrymæ.* Our own position, as to publishers, has been distinctly defined, but will bear repetition. We do not solicit a book from any one: if sent, however costly it may be, we consider ourselves under no obligations to them, except to notice the work at such length, at such time, and in such manner as seems to us proper, and wise, and consistent with other demands upon our pages; and we always endeavor to give each work a careful examination before we express an opinion of it. Books that will not bear examination, had better be sent elsewhere; books that require a notice upon the instant of reception had better be sent elsewhere; and books that are supposed to put us under obligations to the author or publisher, had better be sent elsewhere. With all this, we have no hostility to publishers. We confess, however, that we are a little mortified at the position in which some of our *confreres* place themselves with reference to them.

—The Gazette Hebdomadaire thus discourses upon a topic to which we alluded some months since—we mean Dr. Warren's singular disposal of his body.

"We hope that the physicians of the United States will not hesitate about it, but that they will in dying give this last evidence of their scientific zeal. A collection of celebrated skeletons would have some peculiar advantages. In the place of invoking their shades, the pupils could prostrate themselves before their frame, saying, 'Dear skeleton, cause one of those rays to descend into my mind,' and so on; or, 'Illustrious skeleton! I swear by thy bones,'" &c.

It seems that *material* is growing scarce in France. "Poor patients have no more difficulty in dying than formerly; but they do not wish to be examined afterwards." The opposition of families, and the establishment of burial societies among the poor, are among the influences which are accomplishing the same thing. It is a good sign in a nation when sepulture ceases to be neglected, or to be a matter of indifference.

— The January sitting of the Academy was devoted to business. Reports from the various officers and committees were read and accepted, and the annual election for officers held. The result of

this election is particularly gratifying to most academicians, for it brings into active membership one of the most highly honored and widely celebrated men of our profession, whose prominent position for more than a quarter of a century justly entitles him to those honorable posts to which he can be raised by the suffrages of his professional brethren. It should delight us to honor such men as *Dr. Valentine Mott*, whose brilliant achievments shed a bright light upon American Surgery; and it would be strange if all the world should give him his true meed of merit, only to be denied it at home. Verily it would seem that other questions than merit entered into the distribution of such rewards, and we can not deny that in other years some ungenerous motives have been imputed to the New York faculty for their action in such awards. We are glad that the result of the election in the Academy of Medicine gives a refutation to these gross charges.

— Baron Humboldt,—who does not revere him and wish to know of his personal appearance, as well as of his writings? Bayard Taylor, who has just visited him, thus enthusiastically describes the veteran philosopher:

As I looked at the majestic old man, the line of Tennyson, describing Wellington, came into my mind: "Oh, good gray head, which all men know." The first impression made by Humboldt's face is that of a broad and genial humanity. His massive brow, heavy with the gathered wisdom of nearly a century, bends forward and overhangs his breast, like a ripe ear of corn, but as you look below it, a pair of clear blue eyes, almost as bright and steady as a child's, meet your own. In those eyes you read that trust in man, that immortal youth of the heart, which makes the snows of eighty-seven winters lie so lightly upon his head. You trust him utterly at the first glance, and you feel that he will trust you, if you are worthy of it. I had approached him with a natural feeling of reverence, but in five minutes I found that I loved him, and could talk with him as freely as with a friend of my own age. His nose, mouth, and chin have the heavy Teutonic character, whose genuine type always expresses an honest simplicity and directness.

I was most surprised by the youthful character of his face. I knew that he had been frequently indisposed during the past year, and had been told that he was beginning to show the marks of his extreme age; but I should not have suspected him of being over seventy-five. His wrinkles are few and small, and his skin has a smoothness and delicacy rarely seen in old men. His hair, although snow-white, is still abundant, his step slow but firm, and his manner active almost to restlessness. He sleeps but four hours out of the twenty-four, reads and replies to his daily rain of letters, and suffers no single occurrence of the least interest in any part of the

world to escape his attention. I could not perceive that his memory, the first mental faculty to show decay, is at all impaired. He talks rapidly, with the greatest apparent ease, never hesitating for a word, whether in English or German, and, in fact, seemed to be unconscious which language he was using, as he changed five or six times in the course of the conversation. He did not remain in his chair more than ten minutes at time, frequently getting up and walking about the room, now and then pointing to a picture or opening a book to illustrate some remark.

— Among the distinguished dead, for whom our profession have been called to mourn during the last month, is Dr. John A. Paris, late President of the College of Physicians, London, the following brief account of whose life we take from a London paper :

It is with very sincere regret that we announce the death of this excellent and distinguished man. Few men have run so long and at the same time so honorable a career. For half a century precisely, Dr. Paris had practised as a physician, and had risen to the very highest honors which it was in the power of his professional brethren to bestow. He was born at Cambridge on August 7, in the year 1785, and at twenty-two years of age he was elected physician to the Westminster Hospital—a most distinguished honor for so young a man ; and he continued in the active exercise of his professional duties until within a fortnight of his death. For fifty years, then—a considerable period even in the history of a nation—was the gentleman to whose memory we would fain offer a slight tribute of respect actually engaged in the alleviation of suffering and in the relief of afflicted humanity.

To Dr. Paris, as is well known in the profession and to all persons more intimately acquainted with his career, the office of the physician was no hireling's work to be hurried through for the accumulation of a fortune or earning distinction. It was the business and glory of his life. When but fourteen years of age, he commenced his studies for the arduous profession on which he was about to enter, and followed them up with a zeal incredible in so young a person : when he had attained the ripe age of three-score years and ten, the old man, true to the resolution of the boy, voluntarily took upon himself the arduous duties of President of the Medical Council of the Board of Health, and with his own hand wrote the introductory report on the cholera of 1854.

His personal history may be dismissed in a few brief sentences. Born at Cambridge, as we have said, in 1785, he became a member of Caius College, in the University, and graduated when very young in medicine. Among his contemporaries he was distinguished for the extent and elegance of his classical attainments. The Classical Tripos was not then in existence, and so, independently of the exigencies of his medical degree, he had not at the University any opportunity for displaying that fine and intimate knowledge of the writings of antiquity for which he was afterwards so distinguished

both in private life and as President of the College of Physicians. From Cambridge he went to Edinburgh, then remarkable as a school of medicine, and was the friend and intimate companion of the many celebrated men who, in the first years of the century, had congregated at the Scottish capital. On his return to London, at the age of seventy-two, he was elected, as we before said, physician at the Westmister Hospital, but soon after vacated the appointment, as it was his wish to establish himself in the town of Penzance, in Cornwall.

During his residence at Penzance, Dr. Paris distinguished himself as the founder of the Royal Geological Society of Cornwall; this, we believe, was the first Geological Society in England. When at Penzance, too, he gave to the miners the great boon of the "tamping-bar," the instrument by which they are enabled to pursue their business amid inflammable gases without the fear of striking fire from the rock. By this simple but admirable invention Paris no doubt saved more lives than many heroes have destroyed. In the year 1810 he returned to London, and here for 45 or 46 years he was actively occupied as a practicing physician. He was elected President of the College of Physicians in 1844, and this office he held until the hour of his death.

Dr. Paris was not only known as a physician of the highest eminence—he was as remarkable for his literary ability. The *Life of Sir Humphrey Davy* will ever remain one of the classical biographies of the English language. In connection with Mr. Fonblanque he also wrote the *Medical Jurisprudence*, which has remained a text book with lawyers until our own day. His works of a more professional character were his treatise *On Diet*, which first brought him into notice, and which was published at a very early age; his *Pharmacologia*, which has run through more editions than most books; and his work on medical chemistry. Besides these and many other publications, his *Philosophy in Sport* has attained an enormous popularity, and with his life, the motive for an *incognito* which was never really maintained, has altogether terminated. In so brief a notice as the one to which we are necessarily limited by considerations of space, we can say but little more.

The last ten days of Dr. Paris' life were spent in the midst of excruciating sufferings, which were borne with the most remarkable fortitude. His chief concern appeared to be to console and comfort those around him, who could ill disguise their grief at the impending and irreparable loss. His intellect remained to the last as clear as at any time of his life, and while power of speech remained nobody who listened to him could believe that the end was so near at hand. The public and the medical profession have suffered great loss in the death of John Ayrton Paris, one of the most disinterested, honorable, and able men who have ever practised the profession of medicine. The grief of his own family and of those whom he honored with his friendship is not matter of public concern, save in so far as it may serve to show how this wise and good man was honored and beloved by those who knew him best.